

JPRS Report

Arms Control

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New Nuclear Test Monitoring Instrument Described

Beijing ZHONGGUO KEXUE BAO [CHINESE SCIENCE NEWS] in Chinese 9 May 94 p 2

[Article by Peng Dejian [1756 1795 1696]: "Instrument for Measuring Atmospheric Coherence Length and Isoplanatic Angle"]

[Summary] An atmospheric coherence length measurer/ isoplanatic goniometer was recently built by a CAS Anhui Institute of Optics and Fine Mechanics (AIOFM) group led by Research Fellow Song Zhengfang [1345 2973 2455]. This instrument, developed as an "863-308" State High-Tech Plan (Information Expert Topical Area) project, will provide a key new measurement and monitoring means for atmospheric comprehensive peace [i.e. nuclear test-ban] monitoring. Compared to the differential satellite imagery moving monitoring (DIMM) instrument developed by the European Southern Observatory (ESO), the Chinese instrument meets late-80's international standards. The instrument is designed to measure atmospheric coherence length r by a doubleoptical-path satellite imagery moving differential method and to measure isoplanatic angle theta by a satellite light scintillation method. The prototype AIOFM instrument, completed in July 1992 and incorporating advanced technologies such as CCD detectors and real-time computerized data processing, has been in trial use at the Yunnan Observatory. Scientists there obtained over 2000 sets of data (measurements of r and theta) on 20 different nights. Recently, measurements of r and theta via integration of Cn(h) data obtained by a temperature ripple sonde were taken in Hefei simultaneously with measurements taken in Yunnan via the new method: the average values of the two sets of data differed by only 7 percent.

Underground Nuclear Test Conducted

Rare Public Announcement

OW1006075894 Beijing XINHUA in English 0753 GMT 10 Jun 94

[Text] Beijing, June 10 (XINHUA)—China conducted an underground nuclear test earlier today, said a Chinese Foreign Ministry spokesman here today in a statement.

Tokyo Issues Warning

OW1006144994 Tokyo KYODO in English 1439 GMT 10 Jun 94

[Text] Tokyo, June 10 KYODO—Japan protested to China on Friday [10 June] against its underground nuclear test earlier in the day and warned it could adversely affect Tokyo's economic assistance, now being detailed, Foreign Ministry officials said.

Vice Foreign Minister Jiro Saito called Chinese Ambassador to Tokyo Xu Dunxin to his office and "strongly" protested the test, officials said. Saito told Xu that Japan, the world's only country to have suffered atomic bombings, has especially strong feelings against nuclear testing and called on China not to repeat such tests in the interest of bilateral relations, the officials said.

Another senior ministry official took similar action in a separate meeting with a Chinese embassy minister, voicing concern that such a test would have an undesirable effect on Tokyo's effort to win understanding and support of the Japanese people toward economic assistance for China, they said.

It was an indirect reference to Japan's fourth package of yen credits pledged to China. The two countries are currently identifying projects to be financed by the loans.

Japanese Foreign Minister Koji Kakizawa will also urge Chinese Foreign Minister Qian Qichen during their meeting in Beijing on Sunday to refrain from nuclear tests, the officials said.

Earlier Friday, ministry spokesman Terusuke Terada issued a statement in which he called the Chinese test "extremely regrettable."

'Russian Regret'

LD1006162894 Moscow ITAR-TASS in English 1547 GMT 10 Jun 94

[Text] Moscow June 10 TASS—China has staged another underground nuclear test despite repeated appeals on the part of several states, including Russia, a representative of the Russian Foreign Ministry said here today.

"This event provokes deep Russian regret, the more so China did it at a time of the Geneva multilateral negotiations on comprehensive ban on nuclear tests, which has been supported by all nuclear powers," says the statement received by ITAR-TASS.

"We are also alarmed with the fact further Chinese nuclear tests may endanger the observation of the nuclear tests moratorium by other nuclear powers."

"We would like to hope that the Chinese side will understand its genuine national interests, comply with the appeals of the international community and together with other nations help to achieve complete termination of underground nuclear tests and fulfilment of the Chinese-declared intention to conclude a treaty on comprehensive ban on nuclear tests," says the document.

Australia Protests

BK1606145294 Hong Kong AFP in English 0427 GMT 16 Jun 94

[Text] Sydney, June 16 (AFP)—The Australian government has summoned Chinese Ambassador Hua Junduo [name and title as received] to protest his country's June 10 nuclear test blast, officials said Thursday.

"Senior department officials protested to him about the test yesterday (Wednesday) and reiterated our view that it was deeply disappointing," said a spokesman for the Department of Foreign Affairs and Trade in Canberra.

China carried out the underground blast, which had a strength of 10 to 40 kilotonnes of TNT according Australian scientists, at its Lobnor test site on Friday.

BOSNIA-HERZEGOVINA

Charges of CW Use

Muslim Accused of CW in Ozren-Vozuca Area

LD0506133894 Belgrade TANJUG Domestic Service in Serbo-Croatian 1109 GMT 5 Jun 94

[Excerpt] Banja Luka, 5 Jun (TANJUG)—The Muslim forces have continued using poison gases on the Ozren-Vozuca front. They began using them several days ago, the information service of the Serb Republic Army's First Krajina Corps has said in a statement issued in Banja Luka.

Poison gases are fired from mortars and artillery weapons. [passage omitted]

Muslims' Use in Teslic Area Charged

LD0106110994 Belgrade TANJUG in English 1035 GMT 1 Jun 94

["Pool" item]

[Text] Doboj, June 1 (TANJUG)—Bosnian Muslim forces were attacking Serb positions in the Teslic area, northern Bosnia, on Monday and Tuesday night, using all weapons available, including missiles charged with poison gases.

The brunt of the Muslim attack was launched on the southern part of the Teslic battlefront and on the Kozilo area, which came under a cannonade of artillery shells charged with poison gas, Bosnian Serb army sources said on Wednesday.

The Serbs were forced to respond fiercefully [as received] and neutralize the Muslim shelling in order to protect their positions and the people of Teslic and the adjacent villages.

Serb forces have prevented two Muslim terrorist actions in the south-eastern Teslic front.

The Serb army sources said that Muslim forces at about 5 a.m. (local time) on Wednesday opened heavy anti-aircraft gunfire on Serb defence positions in Lukici, eight kilometres west of the Serb town of Brcko, in northern Bosnia.

From the northern Bosnian Croat enclave of Orasje, Bosnian Croat forces and Croatia's regular troops on Tuesday night opened strong infantry fire on Serb positions seven kilometres away from the area, leaving one Serb soldier lightly wounded.

Serbs Reportedly Use CW in Northern Front

AU3105143594 Sarajevo Radio Bosnia-Herzegovina Network in Serbo-Croatian 1300 GMT 31 May 94

[Rahija Mesic report from the Press Center of the 7th Army Corps]

[Text] [words indistinct] tanks, the Chetniks in this region are also using chemical agents in order to lessen the combat strength of our units. After they had used chemical agents several times, they launched infantry attacks, which, as in the past, were futile and unsuccessful. Unable to realize their intentions, the Chetniks shelled civilian facilities according to their old scenario, though not as intensively as in the past few days.

The aggressor has used all the available weapons in the offensive on our defense lines. Fresh forces are coming from the so-called Yugoslavia. This is evident from the mobilization calls sent via the aggressor's media. The media reports that brothers from Nis will help (?these) Serbs in liberating Serbian territories. To what extent the aggressor considers important the regions of Bugojno, Turbe, and Vlasic is evident from the fact that it has issued mobilization calls to women. The Serbian media is devoting most space to appeals for blood donors. This is the best illustration of the losses that the Golden Lilies of the 7th Corps of the Army of the Republic of Bosnia-Herzegovina have inflicted on them.

CZECH REPUBLIC

Military Denies Developing Bacteriological Weapons

LD0706124794 Prague Radiozurnal Radio Network in Czech 1000 GMT 7 Jun 94

[Text] A news conference held in Usti nad Orlici today was dedicated to the alleged production of virological and bacteriological weapons in Techonin, East Bohemian region. Our correspondent Zdena Cela filed this telephone dispatch:

[Cela] The military Immunology and Bacteriology Research Institute in Techonin in Usti nad Orlici district has never produced, developed, or stored military bacteriological weapons. This is what Dr. Jiri Beran, dean of the Hradec Kralove-based Military Medical Academy who is in charge of scientific work, told the news conference today. Development of a combat biological agent is above all a matter for top scientists in the sphere of gene handling and genetic engineering, Beran went on to say. The point is that all the agents have been identified [zmapovat] and if one wants to develop a new agent, a new part of a genetic information [carrier] would have to be inserted [in the already identified agents]. No work has ever been done on this subject at the Military Medical Academy.

Dr. Beran explained the attacks waged by CESKY DENIK in March this year by saying that editors have little knowledge of the subject and are unwilling to look deeper into the problem.

The matter is being investigated by the Defense Ministry inspection team and by an interministerial commission.

ISRAEL

Defense, Foreign Ministries Prepare for Talks on CW Pact

TA2405101494 Tel Aviv HA'ARETZ in Hebrew 24 May 94 p A1

[Report by political correspondent Aluf Ben]

[Excerpt] The United States is urging Israel to ratify the international convention on the elimination of chemical weapons within a few months. Israel will respond to this U.S. request, which was recently received here, by the

end of the month. The Defense and Foreign Ministries are preparing to hold consultations on the reply.

On 22 May, a discussion on the Chemical Weapons Convention [CWC] was held at Foreign Minister Shim'on Peres' office. Israel signed the convention in January 1993. In its reply to the United States, it will presumably announce that since the ratification date is not until next year, Israel will not address the issue at the present time. To prevent the CWC from harming its security and to ensure a Middle East free of chemical weapons, however, Israel will demand that Arab countries also sign the convention. [passage omitted]

REGIONAL AFFAIRS

Nuclear Dismantlement in Russia, Ukraine

Official Says 50 Percent of CIS Nuclear Missiles Dismantled

LD1006174894 Moscow Radiostantsiya Ekho Moskvy in Russian 1500 GMT 10 Jun 94

[Text] To date, 50 percent of all the tactical nuclear warheads brought to Russia from the territory of CIS countries in Central Asia, the Transcaucasus, Belarus, and Ukraine have been dismantled, our correspondent was told by Vitaliy Yakovlev, a Defense Ministry spokesman. Within the next few months Russia will begin measures to withdraw land-based and air-based strategic nuclear missiles from the territory of Kazakhstan. The compensation mechanism, he said, has still to be agreed. [indistinct passage omitted]

RUSSIA

Duma Questions CWC Ratification, Implementation

944D0049A NEZAVISIMAYA GAZETA in Russian 8 Jun 94 pp 1, 3

[Article by Doctor of Juridical Sciences Vladimir Trofimov under "Arms" rubric: "Chemical Weapons—The Past Without a Future?: The International Concept Is Not Yet Capable of Answering This Question"]

[Text] At the initiative of the Committee for International Affairs, hearings were held in the State Duma on the problem of the possible participation of Russia in international agreements on the disposal of chemical weapons. They were certainly particularly remarkable in that they put into question several quite prevalent stereotypes in our society with respect to the elimination of chemical weapons.

Thus, it can frequently be heard that the adoption in 1993 of the Convention on the Prohibition of the Development, Production, Stockpiling, and Use of Chemical Weapons [CWC] and on their disposal may be viewed as a rather major victory of Russian diplomacy. As you know, this convention was personally signed by Andrey Kozyrev in January 1993 but has not yet been ratified by Russia.

The appearances of experts involuntarily gave rise to the idea that by definition complete and comprehensive chemical disarmament, although desirable, is simply an unattainable dream. Indeed, any work in the field of chemistry may lead to the development of highly toxic substances and there is no way to prohibit this in advance. In principle, the production of toxic chemical agents is similar to the manufacture of many quite peaceful chemicals. This means that there will always be a production base that can be reoriented to military needs. By mixing some completely harmless substances

whose production also cannot be prohibited, a powerful toxic agent arises. This principle, as you know, is the basis of binary weapons.

All of this was reflected in the convention of 1993—it does not directly prohibit binary weapons and removes the laboratory production of toxic agents from international control. In other words, despite its name, the convention does not include a comprehensive prohibition of the production of toxic agents. Of course this defect in the convention stems from the very nature of chemical weapons.

But this agreement also has other special features that are more difficult to explain through objective reasons. Under the convention, for example, the inspection trips of other countries are paid for by the state in whose territory the corresponding inspections are carried out. Considering that Russia has the largest stocks of chemical weapons in the world, it is not difficult to assume that we may simply be subjected to an invasion of inspectors. And is all of this supposed to be at our own expense?

The convention will go into effect when it has been ratified by 65 states. Why not 90 and why not 130? After all, the elimination of chemical weapons would make sense if most of the countries of the world were participating in the convention, primarily those 25 that according to American assessments already have these weapons or are potentially capable of producing them. But, as you know, a quarter of these 25 countries did not even sign the convention and no one knows how many will ratify it. Some Arab states are waivering, referring to the fact that Israel does not want to take part in the Nuclear Weapons Nonproliferation Treaty. Italy has some doubts. It is worth noting that many of these 25 countries are located along the borders of Russia.

So how many states really intend to participate in the treaty? Representatives of the Ministry of Foreign Affairs of the Russian Federation are proposing: "Let Russia be among the first to ratify the convention and then its example will induce other countries to join it." But are such calculations justified?

The convention provides that its participants must introduce sanctions against states not participating in it by restricting their trade in various chemical materials. It is thereby supposed that by establishing a kind of chemical COCOM they can be induced to join the convention. This means that Russia together with the United States will introduce sanctions against some of their neighbors. And if Russia refuses to participate in the convention, then it cannot be ruled out that it itself will fall victim to such sanctions. Was it worth it to agree to include in the convention such double-edged conditions for Russia?

A new international organization is being established to verify the execution of the convention. Russia will duly pay about 6 percent of its considerable budget but the convention does not give any guarantees that the possessor of the largest potential of toxic agents will be included in its governing bodies. Why were our diplomats unable to achieve this?

The convention provides that all participants must eliminate their toxic agents within 10 years after it goes into effect. In the event that a threat to national interests can be proven, which itself is not a simple matter, this period can be extended by another 5 years. Hearings have shown that the United States will meet this deadline but if Russia is able to do so it will only be through a drastic increase in material expenditures. As a result of such haste, moreover, there will be a great increase in the risk of accidents with the most severe consequences, because the corresponding technologies are still far from being well developed. Why were deadlines accepted that are problematical for us but correspond with the planned time for the disposal of American toxic agents?

Repesentatives of the Russian Ministry of Foreign Affairs assert that if Russia refuses to participate in the convention, then no one will. But if Russia's role in this question is so great, why are they trying to convince us that all of the shortcomings enumerated above are the result of a compromise without which there would be no convention? Does this mean that in the course of the negotiations Russia was able to make conditions that other participants in the talks would have to consider? In general, all things considered, this is how it was until the end of the 1990's [as published]. In any event, until this time the Americans thought that there would be no convention and were particularly active in carrying out a program for the creation of binary weapons. And was it here that Russia changed its position?

In general, there were many such "whys" in the hearings. It was also possible to find out one quite incredible thing. It turns out that neither at the moment of our signing the convention nor to this date has Russia had a confirmed national program for the disposal of its own stocks of toxic agents. This means that disposal technologies have not been selected, the sites for such disposal have not been determined, deadlines are unclear, and there is no coordination with the regions. It is also worth mentioning that the Ministry of Foreign Affairs of the Russian Federation solicited consent "at the top" for the signing of the convention, not considering the substantial reservations of very important ministries.

Under these conditions, how can we take on international obligations? And in principle are we capable of meeting them? Judging by the opinion of specialists, this is more than problematical.

Is it possible that all of the plans are already prepared and that they must merely be confirmed? Nothing of the sort. There is not even a single plan in the state program (or concept) but two, although they are similar to each other. It is still necessary to reach agreement with the regions and as a result conditions may be made (most likely fair conditions) that make it necessary to choose only particular technologies and to carry out a series of complex studies, which in principle may change the entire approach to the problem. All of this will take time. The necessary legislation is lacking. The main thing is that there is no funding and a great deal of it is required.

It is interesting to compare the position of Russia with the approach of the United States to this convention. There they adopted the corresponding national program many years ago, when it became clear that the kinds of toxic agents that the Americans had were obsolete and the time of their guaranteed storage was passing. They appropriated money and determined the technologies and disposal sites. At the same time, the United States also initiated the elaboration of the mentioned convention. Its objectives were defined quite openly and clearly in the U.S. Congress: Since we are disposing of our chemical weapons, it is necessary to induce the USSR and other countries to do the same (the U.S. Embassy was kind enough to provide the corresponding materials on this to the Duma). As they say, commentary is superfluous here.

What is it all about and where did such a strange policy of Russia come from? Why were our diplomats so conciliatory in the negotiations? Was it only because world public opinion condemns chemical weapons? The hearings, of course, did not provide an answer to this question. Nevertheless, one can try to offer the following partial explanation. The fact is that participation in the convention is the basis for demands for the necessary financing from the government and Federal Assembly and it is also a unique weapon to break down the resistance of the regions. The convention will induce acceptance of the state program without any particular objections, it may eliminate the need to perform an overly detailed national ecological study, and will facilitate the adoption of the necessary laws.

It is probable that the supporters of Russian participation in the convention truly calculated everything correctly. The existence of international obligations will doubtless be a major stimulus. Moreover the convention may become a means for the receipt of endless aboveplan financing. Indeed, the United States, with stocks of 30 million tonnes of toxic agents [corrected to 30,000 tonnes in 10 June NEZAVISIMAYA GAZETA], initially planned to spend about \$2 billion for their disposal. Subsequently this figure increased to \$5 billion and it is now almost \$10 billion. And if the technology of incineration is rejected, then expenditures will amount to \$15 billion. We have 40 million tonnes [corrected to 40,000 tonnes in 10 June NEZAVISIMAYA GAZETA] of toxic agents. For their disposal, they are also asking for a little over \$2 billion. Is this figure realistic? It is hard to say. The largest share of the expenditures will go to construction and a significant share will be for operation of the facilities. The prices in Russia for construction, complex equipment, and the payment of qualified specialists are now approaching world prices and in some cases they have already exceeded them. This means that our expenditures for the disposal of toxic agents will also be close to those of the Americans and may also rise to \$15 billion.

It seems that a similar situation developed with respect to the START-1 treaty. As far as the author knows, the money allocated for its realization has already been spent and the treaty is far from being completed. But the corresponding departments are not concerned, knowing that as much as they ask for will be given for the treaty. Of course this is only a conjecture but it may be that it is precisely for this reason that all of our draft concepts and programs for the disposal of chemical weapons are oriented to the 1993 convention rather than the question of ratification being oriented to the existence of money and the technical means and to public opinion.

What should be done now? The Committee for International Affairs first of all recommended that in the resolution of questions involving the disposal of toxic agents one should proceed not so much from the requirements of the 1993 convention as from our real and physical possibilities and also that consideration be given to precisely Russian public opinion, especially in the regions. This certainly suggests that because of the lack of adequate financial and physical resources Russia will take the course of disposing of its toxic substances at a slower pace than was foreseen by the 1993 convention, especially since no substantial foreign assistance is expected. Of course to do so it will be necessary to overcome a certain amount of pressure from countries of the West.

It is also important to consider the fact that the risk of ecological disasters, which judging by everything cannot be ruled out anyway (there are simply no absolutely safe technologies at this time, even in the West) will increase enormously because of the utilization of undeveloped methods in the hasty disposal of chemical weapons. By the way, this circumstance caused some deputies to doubt: Are there not some people in the West who, in "giving" us their technologies, are actually getting an opportunity to work them out on the Russians?

Only a small part of the Russian toxic agents need to be destroyed rather quickly—about 6,000 tonnes of quite old munitions—and this requires the allocation of funds in any case. The remaining stocks of toxic agents can be stored for a long time yet, spending only about \$5 million a year for this.

Independent experts stated at the hearings that careful checks of many cases showed that the "chemical diseases" of local inhabitants are actually the result of the action of sometimes unnoticeable but absolutely uncontrolled civilian production rather than leaks from military facilities. In the course of a year in the country as a whole, the military registers just one or two cases of acute contamination and this, as a rule, does not happen at facilities for the storage of toxic agents.

Another matter is the declassification of the sites where toxic agents were disposed of during all the years of Soviet authority. Here it is indeed probable that people are living in dangerous places without even suspecting this. The participants in the hearings gave a direct

recommendation to carry out such declassification. One should also consider the fact that the quantity of toxic agents destroyed in the USSR is not so great in relative terms. The well-known Vil Mirzayanov speaks of 400,000 tonnes but it appears that he has exaggerated this figure by a factor of four, although he probably did not intend to do so. Apparently this data should also be declassified to avoid inflaming passions.

By the way, the position of Mirzayanov in the hearings is worthy of mention in more detail. He understands very well the shortcomings of the convention, which were addressed above, and states frankly that it "does not correspond to the national interests of the Russian Federation" (I quote from the verbatim account—V.T.), because it does not prohibit the West from continuing the development of the latest types of toxic agents.

It is useful also to pay atention to the military aspect of the possession of chemical weapons. Of course they are inhumane and will effect primarily the civilian population. At the same time, however, they are a significant deterrent factor, especially in their latest modifications, and it is also by no means wise to ignore this circumstance. It is clear that less than a dozen saboteurs armed with the latest binary toxic agent are capable of delivering such a retaliatory strike against any state (against military facilities, of course) and that this will certainly take away even the desire to think about carrying out "peacemaking" actions such as those in Somalia on the territory of Russia. Under conditions of the total collapse of our army, the disappearance of a unified air defense system for the country, and the unconsidered elimination of nuclear weapons, one probably ought to think once again whether or not it is right to renounce such an effective and relatively inexpensive weapon. especially unilaterally.

By the way, it is also worth mentioning that there are chemical compounds that do not kill people but are capable of paralyzing them temporarily. There are substances that disable engines and destroy tires. In connection with the events in the Balkans, the United States issued the public reminder that it has such possibilities. It is also well known that although the United States is demanding that we destroy all of our military production, they themselves do not want to do this. There are several reasons for this. The American production systems are more "flexible" and can easily be reorganized for the execution of peaceful tasks. By the way, the reverse transformation is not complicated. It will doubtless be interesting to the readers to learn that if necessary the United States is capable of beginning the industrial production of combat toxic agents, including binary, within two (two!) months, performing several necessary stages in their outfitting. This would also be useful information to the representatives of the Ministry of Foreign Affairs of the Russian Federation, who at the hearings fiercely sought to convince those present that the 1993 convention prohibits binary toxic agents precisely because their industrial production can be begun

only after a number of intermediate experimental stages, which are not permitted by the convention.

According to a notice from the U.S. Embassy sent to the Duma in connection with the hearings, the United States is ceasing only those activities that are prohibited by the convention of 1993. And which ones are not prohibited? The Americans also reported that a number of countries are continuing to produce not only chemical weapons but are even working on bacteriological weapons. It seems that it is worthwhile to give thought to this information. After all, we are being told that it is a matter of the prohibition of weapons that have become outdated. Are they really outdated?

In conclusion, it is also interesting to note that not a single one of the many agreements in the area of chemical disarmament that Russia has signed recently with other countries provides for a ratification procedure. And in one of them, for example, the Russian side directly promised to become a participant in the convention of 1993. So are they trying to present the Duma with a fait accompli and deprive it of the opportunity to choose? This is not ruled out, for it is not permitted to make stipulations in the treaty.

For the time being, the deputies of the Duma are recommending to the president and government at least to maintain the personnel and scientific base involved with chemical weapons, without which within several years it will not be possible to dispose of toxic agents safely with any technologies. And it is precisely then that something irreparable may happen.

Fate of Uranium, Plutonium From Dismantled Weapons

94WC0054A Moscow NEZAVISIMAYA GAZETA in Russian 12 May 94 p 5

[Article by Anatoliy Dyakov of the Center for the Study of Problems of Disarmament, Energy Development and Environmental Protection (Moscow Physics and Technology Institute): "Plutonium: New Aspects of National and International Security"]

[Text] A high-level U.S. delegation to include representatives of Congress and the Department of Energy will arrive in Russia in May to consult on the issue of shutting down nuclear reactors in the "closed" cities of Tomsk-7 and Krasnoyarsk-26.

This visit by American government experts is taking place within the framework of agreements reached between Chernomyrdin and Gore in December 1993 regarding the creation of a joint working group to study and develop a number of issues connected with nuclear arms reduction. During the May visit there are plans to: study opportunities for achieving greater transparency and irreversibility in nuclear arms reduction, and placing civilian plutonium and surplus military plutonium under monitoring, discuss the technical details of mutual inspections of sites where parts made of fissionable materials are stored; and discuss

possible means of utilizing plutonium to prevent its accumulation. This is a multifaceted issue and involves not only technological aspects, but serious political aspects as well.

By the mid-1980's the nuclear arsenals created by the former Soviet Union and the United States during the Cold War totalled more than 60,000 nuclear warheads. Of that number, more than one-half belonged to the USSR. The process of nuclear disarmament begun by the two superpowers and the development of that process, in which the collapsed USSR's place has been taken by Russia, will result in a sharp reduction in the size of that arsenal. In compliance with the START I and START II treaties the total number of strategic warheads retained by each side must not exceed 3,500 by the year 2003. Taking into consideration unilateral pledges to reduce tactical nuclear weapons, over the next decade Russia and the United States will have to destroy several tens of thousands of warheads. The result will be a sharp reduction in the threat of nuclear war.

According to various estimates, the process of destroying nuclear warheads will result in Russia and the United States freeing up a total of approximately 900 metric tons of highly enriched uranium and more than 100 metric tons of weapons-grade plutonium (approximately 50 metric tons for each country). These two materials are the basis for the manufacture of nuclear detonation devices. It takes 3-5 kg of plutonium to make a single nuclear device, and three or four times that much highly enriched uranium. Therefore acquisition of these materials is a priority goal for states seeking to acquire nuclear weapons.

The existence of surplus fissionable materials presents a threat both to Russian and U.S. national security and to world security. Retention of those materials retains the possibility that they will be used to make nuclear weapons again, thereby undermining the irreversibility of nuclear disarmament efforts. The emergence of any crisis in Russian-American relations could quite easily provoke a resurrection of the nuclear arms race. Therefore the goal should be the permanent removal of these materials from the military realm. For Russia the situation is made more difficult by internal political instability, slackening of state monitoring functions, and a difficult economic and environmental situation. Consequently, for it the choice of the optimum means of utilizing (or destroying) surplus weapons-grade fissionable materials and monitoring them is a task of priority importance.

Highly enriched uranium (which consists primarily of the U-235 isotope) may be de-enriched by mixing it with natural uranium and then used in the production of fuel for the nuclear power industry. An agreement has been reached under which Russia will sell the United States uranium with an enrichment level of 4 percent for the purpose of manufacturing fuel. Within the framework of that agreement 500 metric tons of Russian weapons-grade uranium made available through warhead elimination will be reprocessed over a period of 20 years. The value of this contract is in excess of \$12 billion. A separate agreement also provides for mutual monitoring measures that will prevent Russia from using uranium that does not come from military sources and America from using the uranium for purposes not stipulated in the contract. Thus there are presently no technical or political obstacles to the utilization of weapons-grade uranium.

Plutonium is a different matter. Neither Russia nor the United States currently has any real means of destroying it or utilizing it. Realizing the nationwide scale of the plutonium issue and the fact that plutonium is one of the most closely guarded topics, decisions in regard to which are made by a small group of experts, I would like to direct public attention to this matter as well.

Plutonium is in the group of transuranium elements, and is number 94 in Mendeleev's periodic table of elements. It does not occur naturally on Farth, and was obtained by artificial means. The first samples were created by the Seaborg Group (United States) in 1941 by bombarding with neutrons a uranium nucleus with a mass number of 238.

Just like U-235, plutonium-239, when it interacts with neutrons, breaks down, releasing energy and neutrons, which are essential in maintaining a nuclear chain reaction. It is this characteristic that makes it a strategic material. It is used to produce nuclear weapons, and its small critical mass compared to U-235 makes it preferable as a source of nuclear detonation.

The toxic effect of plutonium on living organisms is due to the alpha particles formed when it decays. Alpha particles that enter living tissue destroy the tissue at the cellular level. The radioactivity of one gram of weaponsgrade plutonium is approximately 0.7 curie. Therefore just 2 micrograms of that type of plutonium in the body of a human being weighing 70 kg could prove fatal.

Weapons-grade plutonium is produced in special industrial reactors with a low level of fuel combustion. These are graphite-water fuel-channel-type reactors with an output of around 2,000 megawatts. There were 13 such reactors in the USSR/Russia: five at Chelyabinsk-65, five at Tomsk-7 and three at Krasnoyarsk-26. According to various estimates, the former USSR had produced approximately 150 metric tons of weapons-grade plutonium. There are only three reactors still in operation—two at Tomsk-7 and one at Krasnoyarsk-26—but they increase the quantity of weapons-grade plutonium, for which Russia no longer has any use, by two metric tons a year.

Plutonium can also be produced by any nuclear power plant operating on ordinary uranium fuel. But nuclear power plant reactors that have a high level of fuel burn-up produce energy-grade plutonium. Note that energy-grade plutonium can also be used to made a nuclear detonation device.

All the technological steps involved in obtaining plutonium are accompanied by the creation of a large quantity of liquid radioactive waste. The process of setting up radiochemical technology and the operation thereof result in radioactive contamination, among other things by plutonium, of huge areas where the radiochemical production facilities are located: the Mayak Production Association in Chelyabinsk Oblast, the Siberian Chemical Combine at Tomsk-7 and the Krasnoyarsk Mining and Chemical Combine at Krasnoyarsk-26. Restoring these contaminated areas will require a tremendous amount of work.

According to figures cited in American articles, the production of a single kilogram of weapons-grade plutonium involves the creation of four cubic meters of liquid radioactive waste with a radioactivity concentration of 2 Yez [expansion unknown] curies/cubic meter and a plutonium concentration of 0.005 kg per cubic meter. Thus the former USSR's production of 150 metric tons of weapons-grade plutonium was accompanied by the creation of liquid radioactive waste containing as much as half a billion curies of radioactivity. A substantial portion of this radioactivity was pumped into underground clay strata (at Tomsk-7 and Krasnoyarsk-26). At the Mayak combine these wastes, totalling 570 million curies, are stored in steel containers. The explosion of one such container in September 1957 resulted in the release of 20 million curies of radiation into the environment and the radionuclide contamination of 23,000 sq. km. The population of that area was 272,000, more than one-third of whom were subsequently resettled. The current proposal is that the stored highly radioactive waste left over from the defense program be vitrified, yet at this time there is no reliable, functional vitrification technology.

Plutonium's strategic significance and extremely high radioactivity require a responsible approach to its storage and the selection of a means of utilizing it. Among the proposals of various means of utilizing weapons-grade plutonium there are two that are preferable from the current standpoint: use as fuel in nuclear power plants or vitrification along with the radioactive waste created during its production, with subsequent burial of the waste.

Both these proposed means do not destroy the plutonium as such, they merely shift it from the weapons-grade category to reactor grade. It is essential to note that the greater portion of the plutonium produced in the world as of the present time by energy-producing nuclear power stations—approximately 700 metric tons—is contained in spent fuel. It is assumed that this fuel's high level of radioactivity serves as a sort of physical "self defense" and prevents the extraction of plutonium from

it without highly developed technology. Vitrification also reduces weapons-grade plutonium to the standard for "spent fuel."

At the present time none of the proposed methods has any convincing scientific, technical or economic arguments to support it, therefore use of any one of them will require a preparatory period of at least 10 years. In this context cooperation between various organizations in the United States and Russia aimed at thoroughly studying all possible means of utilizing plutonium appears highly desirable.

It is worth noting that the choice of a means of utilizing weapons-grade plutonium will also be influenced by such factors as the adoption of a concept for the fuel-and-energy cycle. A number of countries—France, Belgium Russia and until recently Great Britain, Japan and Germany—support the concept of a closed fuel cycle. But only France has made some progress with regard to the use of extracted plutonium to produce fuel. As of the present time Russia has extracted approximately 30 metric tons of energy-grade plutonium, which is stored at the Mayak combine. However, in contrast to France, Russia does not currently possess the ability to utilize it.

The utilization concept for weapons-grade plutonium drawn up by the Ministry of Atomic Energy presumes that it will be used as fuel. Within the framework of that concept there are plans to utilize either existing VVER-1000 reactors or the BN-800 [fast neutron] reactors that are under construction at the South Urals Atomic Power Station. It is possible that specially designed thermal reactors will also be used.

VVFR-1000 reactors could be used to denature weapons-grade plutonium using a 30 percent MOX fuel charge (MOX fuel is made from a mixture of slightly enriched uranium and plutonium). However, extensive preliminary work will be necessary to assess the capabilities of reactor control and protection systems and to analyze the effects of possible accidents. Furthermore, Russia does not have an existing enterprise producing MOX fuel for the VVER-1000, and construction of the RT-2 complex at Krasnoyarsk-26 has been suspended.

Nor can the idea of using fast neutron reactors be implemented immediately, due to the lack of such reactors. The existing BN-600 reactor uses uranium fuel, and BN-800 reactors are still under construction. Complex 300 at the Mayak combine, designed to produce MOX fuel for BN-800 reactors, is currently in a state of 50 percent readiness.

The United States supports the concept of an open fuel cycle and currently rejects reprocessing, primarily for two reasons: 1. reprocessing would encourage the proliferation of nuclear weapons; and 2. the use of uranium to produce fuel for power reactors is currently much more economical than the use of plutonium.

Although the United States does not preclude the possibility of reprocessing fuel in the future, at the present

time it has no desire to signal that weapons-grade plutonium has any significance as an energy source, thereby giving the nuclear power industry hope of receiving additional government subsidies for the development and construction of a new generation of nuclear reactors.

Thus both countries will be forced to store their plutonium for a fairly long period of time. We should note that storage is an expensive undertaking. According to various estimates the cost of storing a single gram of plutonium is \$1.00-2.00 per year. Moreover, Russia. according to statements by Ministry of Atomic Energy officials, does not possess an appropriate storage facility, creating difficulties both with regard to the warhead disassembly process and the implementation of reliable monitoring. The cost of building an appropriate storage facility is estimated at several hundreds of millions of dollars. Responding to requests from Russian officials, the U.S. Senate has passed a special act under which Russia will be allocated \$400 million to help with disassembly of its warheads (the so-called Nunn-Lugar bill). However, this bill states that the money may be used only upon receipt of convincing evidence that Russia will not use the materials thus made available to produce new nuclear warheads, and that the United States will have the right to monitor the nuclear weapon dismantling process in Russia. Whereas the first condition seems quite reasonable and acceptable, the second has clearly discriminatory overtones and is unlikely to be accepted by Russia in that form. The solution might be an agreement on mutual monitoring. The primary argument in favor of that approach is the fact that agreements regarding mutual monitoring of nuclear arsenals will provide a solid political foundation upon which to strengthen the nuclear non-proliferation system and get the other nuclear countries involved in the nuclear disarmament process. However, achievement of a comprehensive agreement including provision of complete information on nuclear weapons arsenals, the full amount of fissionable materials produced and the process of nuclear weapons storage and destruction will require much time and could thus have an effect on the rate of destruction. Therefore it would be more appropriate to move toward that goal in stages by concluding a number of intermediate agreements on monitoring of newly produced weapons-grade plutonium, on a complete halt to such production, and on transfer, under bilateral monitoring, of a portion of the plutonium freed up by the process of warhead elimination. At the present time both sides are conducting consultations toward this end. Achievement of these agreements could create a good foundation for progress on the issue of monitoring the disassembly of warheads slated for destruction and in the direction of a full-scale exchange of data regarding nuclear arsenals.

One possible solution to the issue of a Russian storage facility could be to conclude a bilateral Russian-American agreement on the transfer of surplus weaponsgrade plutonium in both countries to bilateral or international control under the aegis of the International

Atomic Energy Agency. This would make it possible to resolve issues relative to the funding of its construction and create certainty about reliable storage and monitoring of surplus weapons-grade plutonium until such time as reliable means of utilizing it have been developed.

CW Issues

Concept for CW Elimination Questioned

94WC0053A Moscow NEZAVISIMAYA GAZETA in Russian 7 May 94 p 4

[Article by Nikolay Filonov, Atominform Central Scientific Research Institute laboratory chief, under "Polemics" heading, entitled "What Kind of Chemical Weapons Elimination Concept Does Russia Need?" Article is a response to the 30 April NEZAVISIMAYA GAZETA interview with A. Kuntsevich which appeared in the 11 May FBIS Arms Control Report, p. 6.]

[Text] In January 1993 Russia signed a convention banning the development, production, stockpiling or use of chemical weapons and requiring their destruction. The convention was drawn up with participation by 70 states, with negotiations extending over a period of 10 years. In October 1993 all the U.N. member states approved it, the kind of full consensus that one rarely finds in international affairs. Now the world community is closely following the process by which the Convention is considered and ratified by the principal countries, i.e. those that produce chemical weapons. These includes the states of the European Economic Community, Japan, China, the United States and Russia. The statutes of the Convention will take effect 180 days after the 65th ratification resolution is handed over for safekeeping, but not earlier than two years after its completion and signing, i.e. not before January 1995.

Now it is already May 1994, and the day is not far off when the Russian State Duma will have to make a decision regarding ratification of the Convention.

Parliamentary hearings on this issue were held on 24 March. All those attending were of one opinion: the Convention must be ratified, because that is in Russia's national interest and will help establish a more lasting peace on our planet. However, those attending also expressed concern that as we take this responsibility upon ourselves we must also measure our capabilities, and in that context it is above all essential to have a tool for implementing the Convention requirements: a "Concept for the Elimination of Chemical Weapons (CW) in Russia." A draft concept was in fact presented at the parliamentary hearings on behalf of the Russian Federation Presidential Committee on Conventional Chemical and Biological Weapons Issue.. The draft in a way builds on the "Comprehensive Program for Gradual Elimination of Chemical Weapons in the Russian Federation," which was drawn up by the same committee in 1992.

Were answers to all the questions of interest to those attending the hearings found in the proposed draft? Unfortunately not. Firstly, the draft concept to a certain extent only reflects the issue of destroying toxic agents and leaves completely open the problem of how to destroy CW. Yet it is a well-known fact that the toxic agent "filling" comprises only 10 percent of the total mass of materials slated for destruction. Finding ways to utilize the shell casings, bombs, filling equipment and special missile components is an equally complicated and expensive undertaking. Secondly, the draft makes no provision for options with regard to destruction technology. In fact, both the Comprehensive Program and the draft Concept give exclusive preference to the chemical method. Yet at the same time all references to chemical-based technologies are in the future tense, indicating that they are still being developed. Thirdly, the proposed national Convention is clearly biased in favor of foreign technology.

That bias is so strong that Point 6, Section 13 of the draft flatly states that one precondition for Russia's fulfillment of its international commitments with regard to CW destruction is "the attraction of financial and technological aid from foreign countries in connection with destruction of the Russian Federation's chemical weapons, including the construction of 'turnkey' CW destruction facilities in Russia." It can clearly be predicted that implementation of that passage will result in Russia's technical and hence political dependency on its Western partners. And the insignificant \$50 millior in U.S. aid intended to supply an experimental installation will wind up causing billions more to flow out of our country and into foreign banks.

Realizing the importance and timeliness of resolving the issue of large-scale CW destruction, in addition to Khimprom (which manufactures toxic agents) several organizations under other ministries have also begun developing various technological alternatives, often doing so at their own initiative.

NEZAVISIMAYA GAZETA has already reported on one possible alternative technology for complete and comprehensive CW destruction-use of nuclear explosions (see: NEZAVISIMAYA GAZETA, 29 March 1994). There exist other proposals as well. For example, the Central Scientific Research Institute for Machine Building under the Russian Space Agency has under the direction of A. I. Papush, a corresponding member of the Russian Academy of Natural Sciences, developed a high-temperature technology and created a working model of a unit designed to neutralize highly toxic substances. On 29 December 1993 destruction of the principal CW components was demonstrated using that experimental unit, along with the scientific and technical principles of this method. In essence the proposed technological process is based on a thermochemical method of transforming a neutralized substance. The experimental unit measures 8.0x1.5x1.5 meters and has a capacity of 1 metric ton per hour. The unit's mobility makes it possible to destroy CW (or toxic agents) at their

storage sites. Unfortunately, neither the Russian Federation Ministry of Defense, represented by its Radiation, Chemical and Biological Defense Troops, nor the Russian Federation Presidential Committee on Conventional Chemical and Biological Weapons Issues, which was headed until recently by A. Kuntsevich, has paid proper attention to this domestically-designed innovation. Its inventors were even refused access to a certain number of appropriate formulas in connection with their demonstration. Yet the "chemical" generals have shown some interest in and consented to the conducting of tests in Russia using experimental units made in the United States and Germany.

I have no reason to doubt the sincerity of the best intentions with which this draft Concept was developed. But the national Concept should be understandable to every citizen of our country, just as in the end it will not be with "aid" from overseas that the problem of CW elimination will be solved, but with the money of Russia's taxpayers.

What would I like to see in the Concept? Firstly, it should reflect the principal ways and means of destroying chemical weapons specifically, not just toxic agents, as envisioned by the international Convention. Secondly, it should make provision for the use of various technologies for CW destruction, depending on the state and conditions of CW and toxic agent storage. For example, munitions in a hazardous state of decay would be destroyed at the site where they are presently located using the aforementioned thermochemical method; toxic agents stored in large containers would be destroyed at refitted Khimprom enterprises; cannister, artillery and airborne chemical weapons would be destroyed with the help of nuclear detonation technology; and so on. The Concept should confirm the most efficient use for each of the proposed technologies, not pit one against the

What must be done in order to accomplish that? It is clear that there is no point in assigning the aforementioned Committee on Conventional Chemical and Biological Weapons Issues to edit the draft Concept a third time. That should be done by a different team, which should include representatives of all the organizations that are offering various technologies for the destruction of CW (or toxic agents), as well as representatives of CW customers and manufacturers, environmentalists, doctors and economists. Their efforts should be covered by the media in a generally intelligible form at both the Federation-wide level and at the local and regional leve. This team's primary task should be to organize and conduct comprehensive assessments (technical, environmental and economic) of all proposed technologies, including mandatory demonstrations. After this collective assessment has been made, the most environmentally safe and economically appropriate CW destruction technologies should be determined, and this should not be done independently by the customer (the Ministry of Defense), as stipulated in Point 5.6 of the draft.

I am convinced that if the issue is formulated in this way Russia is capable not only of destroying its own CW within the established time limits at a minimal cost, but also of providing assistance to other countries around the world.

Destruction of CW Equipment

LD1805180094 Moscow INTERFAX in English 1552 GMT 18 May 94

[Text] Russia is starting the destruction of chemical weapon manufacturing equipment. A decision to this effect was made by First Deputy Prime Minister Oleg Soskovets following his visit of the Khimprom company in Chuvashia which used to manufacture chemical shells.

The production of chemical weapons was discontinued in the factory in 1987 but the equipment capable of doing so has remained intact. Soskovets and Chuvashia's President Nikolai Fyodorov ordered the compiling of a schedule for the stage-by-stage destruction of the equipment.

Viktor Glukhikh, chairman of the State Defense Industry Committee, told Interfax that this decision marked the beginning of a large scale process in the country. The reluctance on the part of the U.S. to sign the appropriate convention might, however, hinder the process, he said.

Detargeting Underway

Satisfaction With U.S., UK Efforts

LD0706180394 Moscow ITAR-TASS in English 1442 GMT 7 Jun 94

[By ITAR-TASS diplomatic correspondent Boris Krivoshei]

[Text] Moscow June 7 TASS—Satisfaction was evoked in Russia by statements of the Governments of the United States and Great Britain in connection with the implementation since May 30, 1994, of arrangements between the leaders of the three states on detargeting of stategic nuclear missiles. Grigoriy Karasin, spokesman of the Russian Foreign Ministry, told this a briefing on Tuesday.

The Russian side again expresses the hope that implementation by Russia, the United States and Great Britain of the initiative for detargeting will precede further measures for confidence-building and strategic stability and will set an example to other nuclear powers, the spokesman said.

Strategic Missile Forces Cited

PM3005161194 Moscow IZVESTIYA in Russian 31 May 94 p 1

[Viktor Litovkin report: "Russian Strategic Missiles No Longer Threaten United States and Britain"]

[Text] As of 30 May 1994 none of Russia's more than 1,000 strategic missiles on alert duty in silos, on submarines, and on road-mobile launchers are targeted against any installations on the territory of the United States and Britain, IZVESTIYA was told by the Strategic Missile Forces [SMF] Press Center.

The missiles have been retargeted in line with Russian-U.S. and Russian-British accords and also in connection with the Russian president's directive, the military said. According to them, the SMF have formulated and implemented special measures to organize the daily activity and lives of the troops with untargeted missiles. At the same time missilemen have given assurances that the missile units' combat readiness remains at the same high level.

Shumeyko Visits Strategic Missile Units in Ivanovo

LD2005141994 Moscow ITAR-TASS in English 1107 GMT 20 May 94

[By ITAR-TASS correspondent Mikhail Shevtsov]

[Text] Moscow 20 May TASS—Chairman of the Russian Federation Council Vladimir Shumeyko decided to personally look into the state of affairs in the Russian Armed Forces on the eve of the upper chamber's examination of the military budget. On Friday he left for the Ivanovo region, where a missile army is stationed.

Shumeyko was accompanied on his trip by commanderin-chief of the strategic missile troops Colonel-General Igor Sergeyev. The missile army is partly armed with the newest "Topol" missile system, destined to become the core of Russia's future strategic missile forces.

Igor Sergeyev told ITAR-TASS that today's talks between the missile troops command and Vladimir Shumeyko would center around the problems faced by those troops. These problems, he said, "are rooted in the share of the budget which is to be allotted the strategic missile troops."

Shumeyko will be shown the troops' battle capabilities and the main components of the training which those who are entrusted with the country's nuclear weapons must undergo. The Federation Council chairman intends to meet with some of the army's officers as well.

Sergeyev said he was grateful to Shumeyko for deciding to first visit the strategic missile units before making a decision on the military budget. "That is explainable, since the Russian military doctrine lays the most responsibility for the state's safety and stategic stability on our forces. The strategic missile troops are the main component of Russia's strategic nuclear forces," the general said.

He further noted that the many problems encountered by the troops are being resolved without compromising their battle capabilities and reliability. The strategic missile troops had to shoulder most of the responsibility under the START-1 and START-2 in ernational disarmament treaties.

At present, the commander-in-chief explained, about 60 percent of the rocket carriers and warheads of the strategic nuclear forces are concentrated in the missile troops. These types of weapons are due to be reduced to one-sixth their former size. Sergeyev also pointed out that, even without any international treaties, Russia would have to eliminate the weapons which used to be produced in the other ex-Soviet Republics.

Russian Defence Minister Pavel Grachev declared at a recent press conference that the country's strategic nuclear forces were the main guarantee of Russia's security in the modern world. At present as well as in the future, the top priority in the development of the armed forces will be given to strategic nuclear weapons, which are the main deterrent factor against any outbreak of hostilities, he said.

The divisions and regiments of the strategic missile troops, which are at the centre of the nuclear forces, are now being technically reequipped. In the last two years, seven more missile regiments have been made battle-capable, all equipped with new stationary and mobile missile systems.

At the same time, strategic missile units are being withdrawn from the other ex-Soviet Republics. By the end of 1994, another four missile regiments are due to be relocated to Russian territory.

Minister on Reduction of Nuclear Weapons

LD0606194094 Moscow Radio Moscow in Russian to Tajikistan 1830 GMT 6 Jun 94

[From the "Slavyanka" program of the Russian Defense Ministry]

[Text] Russia plans to reduce its nuclear arsenal 10-fold by the year 2003. This is reported in the press by Minister of Atomic Energy Viktor Mikhaylov. By that time, he said, in the country [2-second break in transmission] 6,500 highly effective nuclear warheads capable of defending Russia from any encroachments. The famous scientist also noted that if military research into atomic energy is continued, by the year 2000 the appearance of a new type of weapon is possible. This new fourth-generation weapon, in the words of Viktor Mikhaylov, will be directed action weaponry [oruzhiye napravlennogo deystviya].

Yeltsin Introduces Controls on Bio War Material Exports

LD1406165494 Moscow ITAR-TASS in English 1630 GMT 14 Jun 94

[By ITAR-TASS correspondent]

[Text] Moscow June 14 TASS—Russian President Boris Yeltsin signed today a resolution imposing a strict control on exports of gene materials which could be used in a biological warfare.

The list of substances under control includes "pathogenes ... and their genetically changed forms, fragments of genetical material and equipment, which could be used in preparation of bacteriological (biological) and toxic weapons," the presidential press service reported. [ellipses as received]

Views on CTBT Aired at Conferences

American Test Ban Control Model Spurned

LD2505110394 Moscow ITAR-TASS in English 1017 GMT 25 May 94

[By ITAR-TASS correspondent Vyacheslav Bantin]

[Text] Hiroshima May 25 TASS—Russia cannot agree with a recent U.S. proposal on an international control system which will be necessary if an international agreement on stopping nuclear arms tests is concluded, ITARTASS learnt on Wednesday from reliable Russian sources participating now in the UN disarmament conference in the Japanese city of Hiroshima.

The multilateral talks to conclude an international agreement on stopping nuclear tests which started in Geneva last January, centre on a system of control.

According to the above sources, the American side recently offered its own model of control which presupposes the simultaneous application of six verification systems and the establishment of appropriate global structures.

Russian experts believe that it will take at least ten years to implement the U.S.-brokered model. Besides, it presupposes huge financial outlays, which is objected not only by Russia but also by other nuclear powers.

In contrast to Washington, Moscow believes that the application of two systems—seismic and atmospheric control—is quite sufficient. According to these sources, this viewpoint is backed by many participants in the nuclear tests talks in Geneva, including Japan.

The U.S. proposal, the official reply to which Moscow plans to give in the next few days, puts in jeopardy, as the sources stressed, the chance of the timely signing of the Nuclear Non-Proliferation Treaty which expires next year.

This is explained by the fact that most treaty participants, members of the Non-Aligned Movement in the main, insist that the nuclear powers should conclude an agreement on stopping nuclear tests. They agree to prolong the treaty for unlimited duration only under this condition.

'Timeless' Treaty Favored

LD2605150694 Moscow INTERFAX in English 1339 GMT 26 May 94

[From the "Diplomatic Panorama" feature by correspondents Igor Porshnev, Vitaliy Trubetskoy and others]

[Text] Russia is in favor of reaching agreed-upon decisions on the major provisions of a treaty on banning nuclear tests as soon as possible (by next spring), the director of the Russian Foreign Ministry's press and information department, Grigoriy Karasin, said in connection with the talks resumed by the Disarmament Conference in Geneva.

Russia's Foreign Ministry views these talks as a major direction of its efforts in the current year, he stressed at Thursday's briefing. He pointed to Moscow's intention to "contribute to the endeavors to create favorable conditions for next year's conference on extending the Nuclear Nonproliferation Treaty."

As Karasin said, Moscow believes that a "treaty on banning nuclear tests should be timeless and have no ceilings; that it should provide for an effective system of control and for strict sanctions against its violators."

According to the diplomat, "Russia favors a realistic and evolutionary approach to developing the system of international control over the implementation of a treaty on banning nuclear tests, which would provide for using at its initial stage seismic methods, instruments for surveying radioactivity in the atmosphere, and on-site inspections." "Some countries have suggested a number of additional methods, but this may considerably increase expenses connected with control system and lead to delaying the drafting of the treaty," Karasin said.

Yeltsin: Russia Will Uphold Nuclear Nonproliferation Regime

LD0206164894 Moscow ITAR-TASS World Service in Russian 1540 GMT 2 Jun 94

[By ITAR-TASS diplomatic correspondents Nikolay Geronin and Aleksandr Kopnov]

[Text] Moscow, 2 Jun—Russia will firmly uphold the international nuclear nonproliferation regime, Russian President Boris Yeltsin announced today at a state reception in the Faceted Hall of the Grand Kremlin Palace in honor of South Korean President Kim Yongsam. One of the primary goals of this is to guarantee a nonnuclear status for the Korean peninsula, the Russian head of state stressed.

Yeltsin recalled that Russia has proposed an international conference on this issue, which could find a comprehensive solution to the nuclear issue and in particular bring about specific agreements making it possible to reduce and subsequently remove the dangerous confrontation on the Korean peninsula. The main aim is to begin a movement toward trust and cooperation.

Moscow is ready to play and will play an active part in creating international mechanisms aimed at strengthening a climate of trust, security, and cooperation in relations between the states of the Asia-Pacific region, the Russian president said.

Yeltsin expressed confidence that close interaction between Russia and the Republic of Korea would help to strengthen stability in the Asia-Pacific region. In his words, relations with Seoul are one of Moscow's top priorities in the Asia-Pacific sphere.

Russia, the Russian president pointed out, has historically been deeply involved in the affairs of the Korean peninsula. In July it will be 110 years since the establishment of relations between Russia and Korea. Ties are developing well at the present time too. But there is a need to move on and give the "green light" to all cooperation projects in all spheres of life. This applies first and foremost to the economic sphere, the more so since opportunities and reserves do exist for this.

Russia wants the speediest possible reunification of Korea by peaceful democratic means, Yeltsin said. One of the most dangerous threats in Asia and throughout the world will thereby be eliminated. We want to see Korea as a unified, peace-loving, democratic, nuclear-free, and prosperous state and a reliable partner of Russia, the president pointed out. I believe that the way to achieve this will be found by the Koreans themselves. Russia is ready to facilitate the accomplishment of the Korean people's cherished goal of unification as soon as possible.

Deputies, U.S. Senators Discuss Defense Topics PM0706130794 Moscow KRASNAYA ZVEZDA in Russian 7 Jun 94 p 3

[Own Information report: "Two Countries' Parliamentarians Unite"]

[Text] As KRASNAYA ZVEZDA has already reported, there was a meeting in Moscow on 30-31 May between deputies of the Russian Federation State Duma and U.S. senators involved in defense questions. On the U.S. side the working groups were headed by Senators S. Nunn and J. Exon, on the Russian side by S. Yushenkov and A. Piskunov.

The U.S. legislators voiced extreme concern at the state of civilian control in the defense sphere in Russia. Special attention was paid to the need to monitor the observance of the regime governing the nonproliferation

of nuclear weapons and nuclear materials and of chemical and bacteriological weapons and their components. The Russian deputies accepted the need for civilian control within the framework of the approval of the federal budget and verification of its implementation as well as the ratification of international treaties, backed up by the functions of the parliamentary monitoring of their implementation.

During the meeting there was a broad exchange of opinions on the state of affairs in the sphere of strategic offensive weapons. The question of extending the Nuclear Weapon Nonproliferation Treaty in 1995 was regarded as a priority. The two sides agreed that in mutual relations with Ukraine special account is to be taken of the delay in the deadline for the latter's fulfillment of the obligations under the Lisbon protocol on affiliation to the Nuclear Weapon Nonproliferation Treaty, which is holding up the entry into force of the START-1 treaty and the preparation of START-2 for ratification.

Despite the persistent attempts to find coordinated decisions, it has not yet proved possible to find common approaches on the possible levels of the further reduction of strategic offensive arms, even though the sides do not deny the need for that, or on the creation of the conditions for the testing im military theaters of ABM systems relating to the 1972 ABM Treaty.

Considerable attention was paid at the meeting to the use of the U.S. resources allocated by the Nunn-Lugar initiative to the destruction and recycling of nuclear and other types of arms belonging to the Russian Federation. Attention was drawn to the fact that these resources are not being used effectively enough. Of the \$432 million allocated in 1992-1993, the Russian side has used less than \$100 million. In view of the slow rate at which the executive power structures are concluding the relevant agreements it was deemed expedient to hold joint hearings on this question in fall 1994.

It was noted that joint military exercises are an important measure for strengthening confidence between the two countries. Bearing in mind the complex domestic political situation in the Russian Federation, the U.S. side agreed to propose to its government that the initial stage of the joint exercises by peacemaking forces be switched to U.S. territory.

Withdrawal of Nuclear Submarine From Russian Navy

LD1805142694 Moscow INTERFAX in English 1114 GMT 18 May 94

[Text] Interfax learned that one more nuclear submarine would be withdrawn from the Russian Navy.

The submarine is in Vladivostok. Today its crew, headed by Second Rank Captain Vl. dimir Senyiko, came back from the Primorye Region to Kamchatka. The submarine has been manned by recruited sailors. Captain Senyiko said they would not lose their job but would be transferred to another boat.

Strategist Views Russian Nuclear Potential

PM0605121594 Moscow ROSSIYSKIYE VESTI in Russian 5 May 94 p 6

[Part one of two-part article by Vasiliy Krivokhizha, deputy director of the Russian Institute for Strategic Research: "Future of Russian Nuclear Potential"]

[Text] The Soviet leadership's political thinking, particularly as regards military-political strategy, used to be compared in the old days to studied chess gambits. The circumstances of the USSR's collapse and the rapid degradation of society call into question the correctness of this complimentary comparison—at any rate as regards the skills of many of the "chess players" of the perestroyka period. The historians of the future, however, will as usual voice varying opinions about 20th century Russian history and about whether the last Soviet leadership had an inferiority complex or whether they were pioneering a new era, and so forth. What will be seen as history by the researchers of the future, for us increasingly boils down to the problem of survival. Consequently, as we encounter very urgent matters every day it does not seem out of place to attempt to sort out at least certain rules and the sense of the game in which Russia is a player in the nuclear arms sphere.

The current era of total change is, apart from anything else, also a time of radical change in geostrategic realities and ways of thinking. The speed and spontaneity of these changes are probably the reason why our so-called post-Soviet society is parting willingly (and even with unmitigated enthusiasm) from the state appurtenances that largely determined the USSR's status as a military "superpower." There is something irrational—though easily explained in terms of the systemic crisis in society and its revolutionary nihilism—in the fact that we are putting paid with equal measures of indifference ("we don't need that any more!") to the, in many respects controversial but nonetheless technically sophisticated, "Buran" (and thus, in practice, to our entire "statefunded space effort"); to aircraft-carrying cruisers-and next it will be the turn of the entire oceangoing fleet; and to ABM defense and air-defense installations and strategic ground force groupings west of Smolensk and south of Sochi.

There is, however, a sphere of social and professional interests where the consequences of the possible changes should be analyzed with particular care and where discussions should be conducted by specialists in a constructive spirit without any interference from emotions and not necessarily in conjunction with other information such as, say, the examination of the START II Treaty by the new parliament or the adoption of a

long-term program for military organizational development. It will be a question of the prospects for developing our strategic nuclear forces, which can quite justifiably be called the scepter in the double-headed eagle's claw.

It is time to recognize that behind the numerous discussions about the expediency of retaining, removing, or adopting certain weapons systems and their quantitative and qualitative parameters lies a principled and so fundamental question that people prefer not to consider it—will Russia be able under these conditions that are new to it to preserve its nuclear potential and in what form? It is no secret that a number of important components in the nuclear system that used to exist have been lost, and traditional problems such as, for instance, the no-first-use of nuclear weapons and the relationship between a retaliatory strike and a counterstrike are being reconsidered and reinterpreted. Thus, the question of the future of Russia's nuclear potential is becoming not so much theoretical as practical—particularly now that the lack of funds and the absence of constant and focused attention from top organs of power to the problems of the strategic nuclear forces could lead to their irreversible degradation. In tandem with this, the protracted uncertainty about ratification of the Strategic Offensive Arms Reduction Treaty (START II) threatens to seriously delay the entire future disarmament process and introduces additional problems to the choice of the ideal solutions for modernizing the Russian Armed Forces' strategic nuclear component.

Statesmen who should already be taking responsible steps to choose long-term avenues for the organizational development of nuclear strategic forces are feeling an urgent need for a more accurate system of references in the emerging geopolitical situation, a need to understand what global military-political situation they will have to face in the future. And it is very important for them that some fragments of the picture of the future—despite the turbulent processes of change in the world order—are in a number of aspects acquiring new outlines.

A typical feature of the emergent era will be a change in the overall structure of influence in the world. Many specialists are noting that the bipolar structure with two opposed superpowers—the United States and the USSR—is being replaced by a more traditional multipolar structure which, by reducing the opportunities for the superpowers to determine the course of world development, will enhance the role of other countries (such as the countries of Europe and the Pacific region), diversifying the arsenal of their ways and means of influencing world politics. According to a number of forecasts, the weakening of U.S. economic positions in favor of West Europe and Japan will make the United States' bonds of alliance with its partners in Europe and Asia more short-term and unstable, and international relations more complex, unstable, and less predictable as a result. Hence, the overall political situation in the world may be less predictable, hard to control even at regional, not to

mention global, level, and likely to result in the emergence of acute crises and the appearance of additional spurs to confrontation. The distant rumbles of thunder can already be heard.

In the context of a multipolar world with criteria of influence and stability that are somewhat different and by no means always advantageous for Russia, when additional room is created for multilateral political maneuver, allies can very quickly become enemies, and the principle of "every man for himself" (remembering G. Washington's behest) prevails increasingly clearly in politics—under these circumstances it is hardly sensible to rush into all-out disarmament, giving up our national nuclear forces or even discussing handing them over to some kind of collective control. It would be an unforgivable mistake, giving in to complacent ideas about the end of the era of confrontation, to "tear the tails off" all Russia's strategic missiles, although this does not at all mean that we should not use the entire panoply of peaceful means of safeguarding Russia's national security or that we should end the disarmament negotiations.

The range of opinions on this issue, particularly now that politics has become part and parcel of our public awareness, is quite broad. Thus, there is a view (voiced in particular by ISKPAN [expansion unknown] staffers S.K. Oznobishchev and A.V. Surikov) that at a time of the transition to the building of strategic partnership relations between Russia and the United States, the use of the strategic stability criteria which were successfully used in the postwar decades is becoming senseless. Since this is the case, despite all the reservations befitting the current situation, nuclear weapons are allegedly becoming a kind of burden for Russia and should be gradually turned into the "last guarantee" of the security system "not only for Russia and the United States in isolation, but perhaps for a whole group of states united behind the principles of a collective security system within the UN framework."

Admittedly, it seems as though the United States is not yet ready to share with Russia its experience of these innovations, even though their general human and humanitarian thrust is evident. The nuclear powers' lack of enthusiasm on this subject is possibly explained by the fact that achieving an ideal combination of individual and collective means of defense is a complicated task with no single solution. But that is a separate discussion. The actual agenda is different, and one specific problem is that Russia should maintain effective national strategic nuclear forces. At the same time, it somehow seems as though our enemy now is not any specific country or group of countries, but uncertainty (incidentally, the transition to planning for uncertainty has already been reflected in some official U.S. documents on militarystrategic issues).

If we set out the development of military thinking in the nuclear planning sphere extremely simply and without any scrious distortions, it can be said that the development of nuclear weapons arsenals has made certain

changes to the targeted role of military strategy, which has become more broadly interpreted and is seen as a military-political strategy. In reality this has meant a change of emphasis in nuclear planning from the possibility of directly winning a nuclear war to the sphere of implementing political goals by means of the threat of war. The concept of political deterrence has supplemented the concept of nuclear deterrence-literally "containment by means of nuclear deterrence" [sderzhivaniye posredstvom yadernogo ustrasheniya]. It was based on the principle of the "balance of terror"—the certainty that each party to a potential nuclear conflict would inevitably suffer unacceptable damage in any nuclear war scenario. The logic of deterrence presupposed the permanent building up of the two superpowers' nuclear potentials and an increase in the number of nuclear munitions and delivery systems to an irrational level (a kind of "foolish multitude") that guaranteed the impossibility of one side winning in any meaningful way. Implementation of this concept turned into an outright arms race. At the end of the sixties the stupidity of this approach to the organizational development of strategic nuclear forces was so obvious that the parties to the confrontation came to the conclusion that it was expedient to seek (very cautiously and gradually) new approaches to maintaining strategic stability and to implementing the concept of combining nuclear deterrence with arms control (so far only control).

If the strategic nuclear forces of the two states (or coalitions of states) are capable of inflicting unacceptable damage on each other in retaliation (retaliatory strikes and counterstrikes), then both sides restrain each other from aggression, military equilibrium exists between the states, and, consequently, military-strategic stability in their relations is maintained. Thus, deterrence is achieved by the possibility that strategic nuclear forces will deliver a retaliatory strike of such force in response to an enemy first strike that the idea of carrying out a first strike ceases to be attractive.

The method of maintaining strategic balance on the basis of the use of nuclear deterrence proved its effectiveness from many standpoints over the decades. But, like any "precision" instrument, it is very fragile and subject to many factors in real life. Thus, of itself the conclusion that stability exists at any specific moment of time requires a very complex analysis of the military-political and military-technical reality, and consideration of a huge number of varied and, moreover, variable quantities in the most unexpected areas. We can also cite the sensitivity of this kind of stability to different symmetries and asymmetries in arms systems, and imbalances between rivals even within the framework of the "simple bipolar world." Any changes in military potentials, on the one hand, promote the emergence of excessive suspicion in interstate relations, while, paradoxically, on the other hand objectively requiring the maintenance of a certain level of mutual confidence.

In this context many necessary but unilateral steps to sensibly improve national armed forces could upset the strategic equilibrium and should therefore be most corefully weighed up from the standpoint of whether or not they will be seen by the opposite side as an attempt to change the balance in its favor. Caution or active enmity can be caused by the improvement of the technical potential of conventional (nonnuclear) weapons, particularly in terms of warhead accuracy and yield, the development [sozdaniye] of any ABM systems with ambiguous roles, and so forth. The problem of somebody acquiring a decisive military advantage through a technological breakthrough also remains very topical. This likelihood does exist, which could tempt people to play their "untrumpable" card for the purposes of strong-arm blackmail.

That is why Russia and the United States, like other states, need to improve their strategic nuclear forces in areas that strengthen strategic equilibrium. And corresponding joint information about weapons systems in service should be envisaged.

In order to define the main avenues for the organizational development of national nuclear deterrence forces it is very useful to comprehensively analyze and take account of new concepts which have recently been actively developed and actually implemented by Western specialists in the sphere of strategic planning. These concepts are based on the initial premise that the most realistic threat to the security of the United States and its NATO allies now comes not from Russia and the other CIS countries but from "authoritarian" regimes (read "unfriendly," as distinct, for instance, from "friendly dictators"), or regional interstate and interethnic conflicts using conventional weapons. It is within the framework of this doctrine that Western specialists have embarked on the elaboration of new approaches which will define the principles governing the use of nuclear arsenals for the next 10-20 years. In the United States in particular, in early 1993 L. Aspin, the then U.S. defense secretary, had already ordered an urgent review of the concept of the use of U.S. strategic nuclear forces. Although officially the adoption of the new concept is planned only for this year, the main problems that have arisen in the course of its elaboration have been covered in sufficient detail. In particular, the U.S. strategists will not only have to revise the list of targets, but also review once again whether the United States needs such a big nuclear potential, since maintaining it at its current level costs the United States \$10 billion a year at a time when the threat of an all-out nuclear war has significantly diminished. The military are also having to "rethink the methods for deterring new and old enemies." It is worth noting that, in L. Aspin's opinion (and there is hardly any doubt about his competence on geostrategic matters), the main threat to U.S. security is now posed not by an increasingly predictable ("transparent") global strategic foe—as was the Soviet Union—but by a whole team of "political monsters" in the shape of "nuclear smugglers and double-dealing governments that reject international norms.

For all the lack of ambiguity in the interpretations of the role played by nuclear weapons in the present-day world, the renewed U.S. concept of "containment by means of nuclear deterrence" nonetheless remains the most important nuclear planning idea for the United States, and the novel aspect of the utilization of strategic nuclear forces will most probably lie in the search for "some kind of devilishly inventive new principles." Nothing is as yet known about these, incidentally—although L. Aspin admitted, discovering compelling reasons for it, that the approach of "monitoring the nuclear arsenal together with a threat of retribution" which had effectively influenced the Soviet Union, "may not frighten the new owners of nuclear weapons at all." In this event it cannot be ruled out, at least theoretically, that there will be an expanded range of missions for strategic nuclear weapons to carry out-from peaceful containment through deterrence on the basis of the inflicting of unacceptable damage, to the limited combat use of nuclear weapons alongside conventional (nonnuclear) systems. The main aim of the limited combat use of nuclear weapons would be to prevent a military conflict from developing into all-out hostilities—that is, in an unfavorable direction for the state under attack-and to defuse the conflict. We cannot rule out new and original ways of parrying the threat from "nuclear smugglers and double-dealing governments." For instance, the potential threat of nuclear terrorism could be eliminated by implementing the idea of global information transparency in the nuclear sphere, whereby secret activity in manufacturing and moving not only nuclear devices, but in accumulating a "critical mass" of fissile materials would become impossible. Governments that prove intractable in this area could be (as has already happened) removed from the political scene for the required period of time by establishing control over the ruling elites in these countries or with the help (and there are plenty of examples of this too) of limited military and other sanctions-which would easily be feasible within the framework of a policy of regionalism or simply under UN mandate. But the latter measures might not always be successful—therefore the reality of using strong-arm methods, regrettable though it may be, should be retained.

We should be more interested in the question of whether Russia is ready to propose its own vision of the use of strategic nuclear forces. The undoubtedly honest position of the new Russian military doctrine—now being extensively commented upon—on the possible use of a nuclear first strike can be seen mainly as a reaction to traditional strategic challenges and as being largely brought about by the country's situation and, accordingly, by the state of its Armed Forces. To all appearances, even the modernization of Russia's strategic nuclear forces, which is suggested under the framework of the treaties on offensive arms reduction, does not make it possible to do anything but implement deterrence within the framework also of the "traditional"

military-strategic situation with the criterion of inflicting unacceptable damage on any aggressor in retaliatory action.

When talking of the category of "unacceptable damage," we should take account of present-day views of this problem. We realize now that this category has, as it were, two dimensions, and can be framed within two systems of coordinates. It is usual to consider (and, incidentally, this understanding emerged relatively recently), that the criterion of unacceptable damage exists simultaneously as a certain quantitative level of losses and as a kind of psychological barrier.

The question of the norm of unacceptable damage is incredibly complex. Military specialists honestly admit the failure of the numerous attempts to define a more or less objective level for it. Staffs in both Russia and the United States are now using in their practical activity the mathematical value of a set amount of damage (required for deterrence) which nonetheless plays an important role in assessing the strategic balance when defining the limits of restrictions in the course of drawing up disarmament treaties and, most important of all, serves as a kind of guideline in shaping major state programs for the quantitative and qualitative development of strategic offensive arms. We should not downplay the positive significance that the idea of a quantitative assessment of the force required to inflict "unacceptable damage" on an enemy has possessed for the development of the strategic situation, looked at retrospectively. It was this idea that made it possible to conclude more or less objectively that there was nuclear parity between the USSR and the United States—which made it possible for one of the parties to dump its psychological baggage and provided an incentive for a disarmament process based on mutual recognition of the impossibility of either side's winning any substantial advantage in the context of balanced cuts in strategic offensive arms. At the same time, let us emphasize yet again that the criterion of "unacceptable damage" was to all intents and purposes never used as the basis for the adoption of the "final" decision to launch a nuclear strike within the context of the nuclear deterrence doctrine. Its mechanistic meaning (incidentally, if it could have been used as a guideline, then the choice of the time to launch a first strike could easily have been delegated to computers) cannot be related to the huge moral responsibility which a political leader would have to assume when deciding to start a nuclear war. We need only recall the Caribbean crisis, when the correlation of nuclear munitions was 17-1 in favor of the United States. (The Soviet Union had around 290 nuclear munitions, while the Americans had something in the order of 5,000). You can also imagine under what scenario the war in the Persian Gulf would have been played out if Iraq had had a few primitive nuclear munitions at the time. Most probably there would have been no war, and the task of liberating Kuwait would have been resolved by different means.

Few people give much thought to the fact that the category of terror and the category of "unacceptable

damage" in its psychological dimension are historical categories—times change, old moral principles and stereotypes are being tightened up and new ones are taking shape; attitudes toward the permissibility and probability of nuclear war are also being reconsidered by the political leaders of the major nuclear powers. Throughout postwar history common sense has never yet deseted them, which has made it possible at least to avert several global nuclear conflicts. There are no grounds for supposing that the current U.S. leaders have "frozen" their idea of what constitutes acceptable damage for their country as a result of an exchange of nuclear strikes with Russia at the level imagined by President Eisenhower. When in 1989 the U.S. plan for a nuclear attack on the USSR, drawn up in 1957, was declassified, environmental specialists were quick to produce a model of the consequences for the United States of launching such a nuclear strike against the USSR. It turned out that if all the planned 180 high-yield atomic and hydrogen bombs were exploded on Soviet territory, the USSR would be guaranteed to cease to exist as a state, but in two or three weeks the level of radioactive fallout on U.S. territory as a result of the natural spread of radioactive dust through atmospheric air currents would be comparable to 60 Chernobyls. Of course, the accuracy of these assessments (from the "greenhouse effect" to "nuclear winter") can be disputed, but one would like to hope that nobody would try to do a real experiment to check them

More and more experts today are inclined to think that nuclear weapons cannot be used in principle.

It is, nevertheless, not possible to wholly agree with this, since the unambiguous exclusion of the possibility of the use of nuclear weapons removes their deterrent effect. You could even use sophistry to prove the opposite. But in practice the basis of deterrence is the probability of the use of nuclear weapons. References to the irrationality of their use and their terrible consequences, which make it impossible to achieve the political aims of a war, are convincing but leave room for doubt. For instance, in August 1914, when World War I was already building up a head of steam in Europe, certain U.S. newspapers thought it appropriate to state something to the effect that the systems (primarily artillery systems) in the sides' arsenals were so destructive that it was difficult even to imagine the consequences of a war-and therefore there could simply not be a war. Another example is that Indian tradition has it that the events described in the heroic epic "The Mahabharata" (compiled in its present form around the middle of the first millennium) relate to some wars and great social upheavals of the fourth millennium BC. The epic describes various types of what we would now call mass destruction weapons, whose use required a difficult psychological barrier to be overcome. R. Oppenheimer, one of the developers of the atomic bomb, directly associated the Mahabharata's "light brighter than a thousand suns" with a nuclear explosion For us it is not so important which modern arms systems might correlate to the types of weapons described there.

What is important was something else—there was an entire science behind their use (star-gazing and their own system of combat using "divine weapons"). "No man should ever think of warring with them. Should they fall into the hands of the weak, they could consume this entire transient world. They should always be used as a defense against other weapons. They are wonderful, they cannot be parried, but they can repulse an attack in which any other weapon is used [divnoye, ono neotvratimo, no udar vsyakim drugim oruzhiyem ono otbivayet]." The psychological barrier was nonetheless overcome, and the weapons were used, despite the warning that some types of them would lead to an effect, seen in a modern reading, on the human genetic code. We can only hope that the current system of deterrence will prove more effective.

Unlike the United States, an effective strategic nuclear forces structure for Russia which would guarantee the nuclear deterrence of any aggressor in any strategic situations, is a triad: Strategic Missile Forces plus Naval strategic nuclear forces plus Air Force strategic nuclear forces. Excluding the Strategic Missile Forces, the Naval strategic nuclear forces or the Air Force strategic nuclear forces from the triadic structure of Russia's strategic nuclear forces would lead, according to certain calculations, to an increase in the number of nuclear munitions required for deterrence within the strategic nuclear forces by a factor of 1.2-1.6, and in individual strategic situations, to the nonfulfill of the combat mission. This discrepancy in the rational structures whereby the Russian and the U.S. strategic nuclear forces are composed is attributable to the inferior survivability of the naval component of Russia's strategic nuclear forces (see V. Belousov's article) as compared with the analogous parameters of the U.S. strategic nuclear forces. This deficiency in the Russian naval strategic nuclear forces may be compensated for and is compensated for by a Strategic Missile Forces land-based stationary and also road-mobile force. The triadic structure of the Russian strategic nuclear forces provides a guaranteed counter to technological breakthroughs in the military sphere, for example in air defense, ABM defense, or antisubmarine defense. Such a strategic nuclear force structure creates a great deal of uncertainty for a possible aggressor as to the effectiveness of his preemptive strike, and is a factor which stabilizes the strategic equilibrium. Therefore it is impermissible to remove one of the components from the Russian strategic nuclear forces.

Scientist Invents New System of Radiation Protection

LD1506105894 Moscow ITAR-TASS in English 0928 GMT 15 Jun 94

[By ITAR-TASS correspondent Gennadiy Kipkeyev]

[Text] Nalchik June 15 TASS—A system protecting shelters and homes against radioactive fallout has been invented and tested at a special testing range by Kuzer Varukov, a scientist working at the university in Nalchik, the capital of Kabardino-Balkaria (Russian autonomy).

A republican commission concluded that "the inventor proved in practice the possibility of making apartments and industrial premises impervious to radiation and providing effective collective protection to urban and rural residents at a lower cost."

The invention can be used in the clear-up operations after accidents at nuclear power plants and other enterprises which deal with radioactive and toxic substances. It has been found effective by specialists of the Russian nuclear power ministry. In their opinion, it allows to localize emission of harmful radiation and substances for the duration of work aimed at preventing discharge of nuclides in the environment.

AZERBAIJAN

Radar Station Remains Under Russia's Domain NC1306204694 Baku TURAN in English 1658 GMT 13 Jun 94

[Text] Baku, June 13 (TURAN)—"The Gabala Radio-Locator station remains under Russia's jurisdiction and it will be used within the framework of the CIS Collective Security Pact," said the head of Azerbaijan's Defense Ministry, Azad Alizade [name and title as received], to TURAN.

On June 11, Pavel Grachev and President Aliyev concluded a preliminary agreement on this matter. "A principal agreement will be worked out by specialists of both countries and after that a final document will be signed," said Alizade. The same source said that the staff of employees of that station will include Russian military personnel and a few Azeri soldiers.

Another source from Azerbaijan's Defense Ministry told TURAN that Russia will use the radio-locator station free of charge and in exchange, Moscow has allegedly promised to "make other concessions to Azerbaijan in military affairs."

The Gabala radio-station was built in 1982-84 and it is the most powerful station in the south of the former USSR. It is used to observe the launching of ballistic missiles.

BELARUS

Embassy Asks U.S. To Confirm Missile Aiming Discontinued

WS0206125894 Minsk Radio Minsk Network in Belarusian 1200 GMT 2 Jun 94

[Text] Our reporter has learned that the Belarusian Embassy addressed the U.S. National Defense Council on 31 May requesting confirmation that U.S. strategic

missiles are no longer aimed at Belarus. The request was prompted by the fact that the U.S.-Russian declaration of 14 January 1994 confirmed the intention of the presidents of the two states to discontinue aiming their strategic missiles by 30 May 1994. The State Department confirmed to the embassy that the aiming of all U.S. strategic missiles had been discontinued, including those aimed at Belarus, from whose territory Russian strategic missiles are currently being withdrawn. Our reporter points out that this is an important step toward definite elimination of the traces of the cold war.

Withdrawal of SS-25 Missiles to Russia Reported PM2305090594 Moscow NTV in Russian 1700 GMT 15 May 94

[From the "Itogi" newscast: Video report by Aleksandr Gerasimov, identified by caption, on the withdrawal of SS-25 missiles from Belarus]

[Text] [Gerasimov to camera and over video of missile transporters] SS-25 missiles have been on alert duty in Belorussia [Belarus] for the past three years. The last of nine missiles of the Feodosiya Red Banner Order of Suvorov Missile Regiment is leaving the country today.

The strategic systems leaving for Russia will most probably be sent to the Transbaykal region or Nizhniy Tagil. They are not subject to the START treaty and will, according to Defense Minister Pavel Grachev, continue to serve as the main guarantor of Russia's security at least until the turn of the century.

In the course of this year four regiments and 36 "Topol" [SS-25] missiles are to leave Belorussia. In accordance with international agreements, the republic is destined to become a nuclear-free state next year.

Irrespective of all these goings-on, the nuclear arms will remain in full readiness during the entire period in question. At the same time, none of the servicemen will ever know where the missiles were targeted, or what the yield of their warheads was. [video shows officers working in front of consoles]

[First officer] Attention! Combat orders received.

[Second officer] Understood. Operational mode of apparatus changed.

[First officer] Personnel to shelter. [Words indistinct] complete isolation [words indistinct].

[Second officer] Air alert, air alert!

[Gerasimov] Russian officers claim that the redeployment of strategic missiles is a completely safe operation. The nuclear warheads, removed from the carriers beforehand, are conveyed to Russia by means of specially designated trains. The missiles themselves are safely camouflaged in specially equipped railcars, externally indistiguishable from ordinary refrigerator railcars.

[video shows transporter on the road, watch tower, refrigerator-type railcar with missile inside]

As distinct from Ukraine and Kazakhstan-the other post-Soviet nuclear republics—everything connected with ensuring the combat capability of the missile systems is being withdrawn from Belorussia. The Minsk authorities are not obstructing the Russian military. They will be inheriting the garrisons and army accommodations and property whose future is yet to be defined. The Belorussian Interior Ministry has its eve on the secret launch position facilities. The concrete structures surrounded by barbed wire are ideal sites for prisons. The Belorussian Army wants the barracks. The Chernobyl State Committee would not mind taking over divisional areas as rehabilitation centers. But so far none of these agencies have funds to maintain these facilities. Army housing units could turn into dead zones. Because of their location in the forests, far away from populated areas as a rule, they are of no interest to the local population.

Unemployment will rise sharply in Belorussia with the withdrawal of the Russian missile troops. Most of the warrant officers and contract servicemen are local inhabitants. The crisis-ridden economy will not be able to provide them with jobs.

In many rural areas of the republic cash may simply disappear. Ninety percent of the money in circulation came from the budgets of the Russian units. Nonetheless, the local authorities are viewing the army withdrawal calmly.

[Vladimir Malets, chairman of Lida City Soviet, identified by caption] I wouldn't say that the Russian Army created problems for the local population, as is sometimes claimed in the press, saying that there was friction. In my opinion this is not true. Relations were normal. If we had problems, such as forest fires, we had their understanding and cooperation. They even helped us with things like that. So I think that all this talk that we can sigh with relief now that the Russian Army is leaving is just words. We have lived normally side by side.

[Gerasimov] Serving in Belorussia was always the dream of officers in the former Soviet Army—a mild climate, excellent staffing by virtue of its being a border district, and firm social guarantees.

The Russian military are leaving the republic with understandable regret. But leaving nonetheless. Before, the army and the people were one. Now it is the army and politics.

Aleksandr Gerasimov and Nikolay Fedorov reporting for NTV from Belorussia. [video shows extensive views of missile facilities, trucks, hangars, garrison in the woods, railcars, missile transporters]

Travails of ICBM Regiment Relocated From Belarus to Mariy El

94P50149A Moscow MOSKOVSKIY KOMSOMOLETS in Russian 21 Apr 94 p 1

[Yuliya Khaytina article: "For Each Enemy—One Topol.' Missile Regiment on Combat Alert."]

[Text] After saying farewell to Belorussia [Belarus], the RS-12M mobile intercontinental nuclear missiles, customarily called simply "Topols" [poplar trees], along with their support systems, have arrived home in Russia—in a division in Yoshkar-Ola. Col Vladimir Kashkin's missile regiment, having gotten off combat alert duty, was not part of our military forces which were serving with the 43d Missile Army in Ukraine and which were moved out of there by the sensitive local leadership, taking nothing with them: All military property now belongs to Ukraine.

The system of barriers at the "missile corner" where the Topols are located is very inhospitable to those not authorized to be there. For example, the so-called electrified zone looks like a sort of spiney network, through which at regular intervals an approximately 1500-volt current flows.

Officers and noncommissioned officers service the Topols. This gives them the modest right to call themselves Strategic Missile Forces professionals. For good service, an officer with the rank of major can earn 300 thousand rubles a month—they get money for food, for keeping up appearances, for shift duty, and for other good things in life. In view of the fact that most men in military service do not have apartments and do not expect to have them any time soon, but do have plenty of unemployed wives and hungry children, one can say happily that our great Motherland's nuclear shield is in the hands of enthusiasts!

But fortunately the country is poor and the Defense Ministry poorer, while an officer is a sort of father in a subsistence economy. He must not only service the missiles, but in his "free time"—as if he had any—he must build a barracks, mess hall, and so on. Their desperate wives stubbornly work as communications officers, dispatchers, and so on, and proudly contribute their 150 thousand rubles to the family budget. There are 108 of them in Vladimir Kashkin's regiment—almost the entire communications and medical staff.

Vladislav Zotin, president of the Republic of Mariy El, after he attended the above-mentioned ceremony, felt so sincerely about "his" military men that he thought that the best way to prevent bad consequences in the missile forces was to visit personally the General Staff in Moscow. He asked for more generous financing so that the forces could be at normal strength. As to whether the presidential travels will help the missile troops—who knows, but his travels have made them feel more friendly towards their commanders.

KAZAKHSTAN

Kazakhstan's Foreign Minister Signs Partnership for Peace

AU2705121794 Paris AFP in English 1204 GMT 27 May 94

[Text] Brussels, May 27 (AFP)—Kazakhstan on Friday [27 May] became the 19th country to join the Partnership for Peace program with NATO, with Foreign Minister Kanat Saudabayev saying it would help contribute to world peace and stability.

"This document responds to the interests of our country which strives for stability," the minister said after signing the document. "We do not accept any kind of confrontation or conflict."

The North Atlantic Treaty Organisation program launched last January provides for increased military cooperation between the Atlantic Alliance and former Soviet bloc states.

In response to reporters' questions, Saudabayev said his country, one of four former Soviet states to hold nuclear arms, along with Russia, Ukraine and Belarus, would continue sending nuclear arms to Russia for dismantling "after some technical questions are solved."

Kazakhstan up to March had transferred to Russia 12 of a total 104 SS-18 nuclear missiles for dismantling under terms of the START I Strategic Arms Reduction Treaty.

At the signing ceremony, NATO Deputy Secretary General Sergio Balanzino hailed Kazakhstan as a signatory of both the START and the Nuclear Non-Proliferation Treaty, saying it was a "sign of your commitment to the reduction and elimination of nuclear weapons on your territory."

LATVIA

Russia-Latvia Skrunda Agreement

944K1061A Riga DIYENA in Russian 23 Mar 94 pp 9-10

[Draft of 15 March 1994: "Agreement Between the Russian Federation and the Latvian Republic on the Legal Status of the Skrunda Radar Station During the Period of Its Temporary Functioning and Dismantling"]

[Text] The Russian Federation and the Latvian Republic, hereinafter referred to as the Parties, have agreed to the following:

Article 1

The present Agreement shall be an inseparable part of the Agreement between the Russian Federation and the Latvian Republic on the conditions, deadlines, and procedure for complete withdrawal 1 om the territory of the Latvian Republic of the Armed I orces of the Russian Federation and their legal position during the period of withdrawal from [as received] 1994.

Article 2

- 1. The Skrunda Radar Station, hereinafter referred to as the Facility, is a Russian military institution under civilian control. Nothing in the present Agreement shall be regarded as giving this Facility the status of a military base.
- 2. The Facility includes structures, equipment, and individual components listed in Appendix No. 1 to the present Agreement.
- 3. During the period of its temporary functioning the Facility shall provide for radar observation of space.
- 4. Additional installation or replacement of equipment and components or construction work, as a result of which the Facility is modernized or its functions or technical specifications are changed, shall not be allowed.
- 5. During the period of temporary functioning of the Facility the Latvian Party shall retain the Facility's radio communications frequencies and also communications channels which it uses as of the moment of the signing of the present Agreement. The Parties shall be obligated not to allow interference in the operation of the Facility and communications network or radio broadcasting and television of the Latvian Republic. In the event of the appearance of interference the Parties shall take immediate measures to eliminate it.

Article 3

- 1. The Latvian Party shall turn over to the Russian Party for temporary use a plot of land with an area of 164.5 hectares designated on the topographical map which is an inalienable part of the present Agreement (Appendix No. 2) on which the Facility is located.
- 2. The Russian Party shall pay rent for the land granted for temporary use in the amount of U.S. dollars per year.
- 3. The sum indicated in point 2 of the present Article shall be transferred in two payments each half year: before 30 June—50 percent of the annual sum, before 31 December—the remainder of the annual sum. In the event of default of payments the Russian side shall pay a penalty in the amount of 0.05 percent for each day of default.
- 4. Any construction work on the territory of the Facility shall be allowed only during the period of its functioning after acquiring permission from the Latvian Party in keeping with the provisions of the present Agreement. This work may be done by the service personnel of the Facility or outside construction organizations of the Latvian Republic.

Article 4

- 1. Neither of the Parties shall use state symbols on the outside of the Facility.
- 2. All inscriptions outside the Facility must be in the Latvian language.
- 3. All inscriptions on the territory of the Facility shall be in the Latvian, Russian, and English languages.

Article 5

- 1. The Russian Party shall appoint its authorized representative (hereinafter—Manager of the Facility) and also individuals to act as manager if for any reason he cannot perform his duties himself.
- 2. The Manager of the Facility shall provide for management of the Facility and supervision of its activity, be responsible for the safety of the Facility, and regularly, no less frequently than once a month, report on work on the Facility and the execution of the present Agreement by the Combined Commission envisioned by Article 14 of the present Agreement.
- 3. The Latvian Party shall appoint its authorized representative (hereinafter—Representative of Latvia) and also individuals to perform his duties if for any reason he cannot perform them himself. The Representative of Latvia shall provide for external protection of the Facility, enforce the execution of the present Agreement and work on the Facility, and also, regularly, no less frequently than once a month, report to the Combined Commission.
- 4. The Manager of the Facility and the Representative of Latvia shall cooperate in solving problems related to the execution of the present Agreement.
- 5. At the request of the Manager of the Facility or the Representative of Latvia, any question may be submitted for consideration at the regular meeting of the Combined Commission. If one of the Parties thinks that the question requires an immediate solution at the level of the Combined Commission, it can demand that it convene an extraordinary session. In this case the session shall be conducted within three days of the receipt of the request.
- The Representative of Latvia may visit the Facility at any time, informing the Manager of the Facility of this ahead of time.

Article 6

The number of personnel directly employed in the functioning of the Facility shall not exceed 599 military specialists and 199 civilian employees. Moreover, the Russian Party during the period of temporary functioning and dismantling of the Facility shall strive to reduce the number of military specialists by replacing them with civilian employees. Personnel who are citizens of the Latvian Republic and individuals residing

permanently on its territory with the appropriate qualifications may be hired as civilian employees.

The indicated number does not include guards for the Facility or members of families of personnel, residents, and citizens of the Latvian Republic hired by the Manager of the Facility on the basis of labor agreements to work in the social sphere (trade, municipal services, medical and sociocultural services, preschool and school institutions).

Article 7

- 1. The Latvian Party at the request of the Russian Party shall issue temporary residency permits and other necessary documents required in connection with the arrival, departure, customs formalities, and residence in the Latvian Republic of citizens of the Russian Federation who are providing services for the Facility and members of their families. The general conditions for permits for the Latvian Republic in effect as of the time of the signing of the present Agreement shall apply to Russian personnel sent to work at the Facility. Individuals with work passports shall receive permits free of charge.
- 2. The issues mentioned in point 1 of the present Article shall be resolved through diplomatic channels. The corresponding documents shall be requested promptly—as a rule, 20 days in advance.

Article 8

- 1. Personnel employed at the Facility shall be under the jurisdiction of the Latvian Republic with the exception of those specified by points 2 and 4 of the present Article.
- 2. Labor relations among citizens of the Russian Federation employed at the Facility, including the examination of labor disputes, shall be regulated by legislative acts of the Russian Federation.
- 3. On the territory of the Latvian Republic criminal and civil cases and also cases of administrative violations involving individuals who are personnel at the Facility and members of their families, taking into account the provisions of points 2 and 4 of the present Article, shall be subject to the jurisdiction of the Latvian Republic.

Individuals who are personnel of the Facility and are citizens of the Russian Federation and also members of their families who are citizens of the Russian Federation shall enjoy in institutions of the Latvian Republic the same procedural rights and responsibilities as citizens of the Latvian Republic.

4. The Russian Federation shall exercise jurisdiction with respect to individuals who are personnel at the Facility and are citizens of the Russian Federation and members of their families who are citizens of the Russian Federation in keeping with legislation of the Russian Federation in the following cases:

- a) if they commit crimes or administrative legal violations against the Russian Federation and also against individuals who are personnel of the Facility and are citizens of the Russian Federation and also members of their families who are citizens of the Russian Federation:
- b) if individuals who are personnel of the Facility and are citizens of the Russian Federation commit crimes and administrative legal violations during the performance of their official duties.

Authorized organs of the Russian Federation and authorized organs of the Latvian Republic may request of one another transfer or acceptance of jurisdiction with respect to individual cases specified by the present Article.

5. In cases where individuals who are not personnel of the Facility, are not citizens of the Russian Federation, and are not members of families of individuals who are personnel of the Facility, and have citizenship of the Russian Federation, commit crimes or administrative legal violations against the facility and also against individuals who are personnel of the facility and members of their families, the guilty parties shall bear responsibility according to legislation of the Latvian Republic.

Article 9

- 1. Individuals who work at the Facility and members of their families, in keeping with legislation of the Latvian SSR, shall own, use, and dispose of mobile and immobile property legally belonging to them with rights of ownership, and in particular they may:
- —sell or in another way transfer the right of ownership to the immobile property belonging to them to relatives, citizens, or other residents residing in the Latvian Republic;
- —move, sell, or in other ways dispose of mobile property belonging to them with the right of ownership;
- —move or transfer their monetary funds from the Latvian Republic to the Russian Federation.
- Individuals employed at the Facility and members of their families shall take advantage of the services of public health and postal and banking institutions of the Latvian Republic under general conditions.
- 3. A secondary school for teaching children of individuals working at the Facility may function on the territory of the Facility.

Article 10

- 1. The Russian Party shall have the right, observing the requirements of point 4 of Article 2 of the present Agreement, to bring into the territory of the Latvian Republic equipment and materials necessary for work at the Facility.
- 2. The freight mentioned in point 1 of the present Article shall not be subject to customs duties and fees, with the

exception of payment for specific services. The freight shall be subject to customs inspection. The shipper of the freight or the individual accompanying it shall have the right to demand the presence during customs inspection of the Manager of the Facility or his representative. Freight to which access is prohibited out of considerations of secrecy shall not be subject to customs inspection if accompanied by documents indicating the secret nature of the freight. In exceptional cases when there are sufficient grounds, such freight may be inspected with a substantiated request from the customs organs of the Latvian Republic in the presence of a representative of the Facility.

- 3. The rules specified by points 1 and 2 of the present Article shall be applied only if the Manager of the Facility, no less than three days before the shipment of the freight to the territory of the Latvian Republic, notifies the Representative of Latvia of this in writing, communicating information about the cargo, its use at the Facility, and also the border crossing location.
- 4. Service personnel and members of their families who are citizens of the Russian Federation, after obtaining the documents indicated in Article 7 of the present Agreement, may ship personal effects and household goods into the Latvian Republic or out of its territory without paying customs duties or fees, except for payment for specific services. With respect to the movement of other items, the procedure is determined by normative acts of the Latvian Republic shall apply.
- 5. Freight shipped from the territory of the Facility outside the territory of the Latvian Republic shall not be subject to customs duties or fees except payment for specific services. Freight shall be subject to customs control according to point 2 of the present Article.
- 6. Courier and postal communications and transportation of work-related documents and postal dispatches shall be organized by the Manager of the Facility according to a procedure agreed upon with authorized organs of the Latvian Republic.
- 7. Means of transportation belonging to the Facility shall be registered in the Latvian Republic. Special means of transportation shall be allowed to be brought in only with permission from the Latvian Party.

Article 11

- 1. During the period of temporary functioning and dismantling of the Facility the Russian Party and the Manager of the Facility shall provide for observance of the requirements of normative acts of the Latvian Republic for protection of the environment.
- 2. Upon completion of the dismantling work envisioned by the present Agreement, an expert ecological appraisal of the territory of the Facility and its environs shall be

conducted with the involvement of international specialists on the initiative of one of the Parties. All costs related to the expert appraisal shall be borne by the Perty that initiates it.

- 3. In the event that during the period of temporary functioning and dismantling of the Facility people, animals, or plants are infected with dangerous diseases which could spread beyond the territory of the Facility, the Manager of the Facility shall immediately inform the Representative of Latvia of this and take the necessary measures to prevent further spreading of the disease.
- 4. With the participation of international specialists, on the initiative of one of the Parties, there may be an expert appraisal of the impact of the activity of the Facility on the environment. All costs involved in this expert appraisal shall be borne by the Party that initiates it.
- 5. If it is established that the activity of the Facility causes harm to the environment or the population, or the ecological expert appraisal deems that such harm has been caused, the Russian Party must make reimbursement for this harm and also take measures to eliminate its causes.
- The Russian Party shall take measures to minimize the inconvenience caused to the local population because of the activity of the Facility.

Article 12

- 1. External guarding of the Facility shall be provided by personnel appointed by the Latvian Party and be under the jurisdiction of the Representative of Latvia. The external guard shall not impede the transfer of freight onto the territory of the Facility, the removal of freight from the territory of the Facility, or the movement of personnel and members of families of personnel.
- 2. The internal guarding of the Facility shall be provided by the Russian Party in keeping with existing normative acts of the Russian Federation. The number of military specialists functioning in the internal guard of the Facility may not exceed 89. In order to perform their functions the internal guard on the territory of the Facility shall have the right to bear light weapons. Information about the quantity and serial numbers of these weapons shall be submitted to the Representative of Latvia.
- 3. Access and entry security procedures shall be established for access to the territory of the Facility. The form of access and the security procedure shall be established by agreement between the Manager of the Facility and the Representative of Latvia.

Article 13

1. The Latvian Party shall provide for supplying the Facility with electric energy (transferring it from the Russian Federation) and water. The Russian Party shall be obliged to promptly make payment for transit of

electric energy through the networks of the Latvian Republic according to the procedure and at the rates established by agreement with the Latvian Party. The Russian Party shall be obligated to promptly make payment for supply of water indicated in the present Article to the Facility according to the procedure and at the rates accepted in the Latvian Republic. Interruptions in the supply of electric energy or water that have arisen for reasons beyond the control of the Latvian Party and its services [(words indistinct]) shall not be regarded as a violation of the obligations of the Latvian Party.

2. Other services and deliveries shall be provided through the conclusion by the Manager of the Facility of the corresponding agreements with individuals and legal entities of the Latvian Republic. Disputes related to the fulfillment of these agreements shall be resolved according to the procedure determined by legislation of the Latvian Republic.

Article 14

1. For supervision and coordination of the execution of the present Agreement, a Combined Commission shall be created which shall consist of an equal number of representatives of both Parties and a representative or representatives of one of the international organizations to which both Parties belong. The Parties shall be obligated to reach agreement on the organization to be invited and invite its representative or representatives before the present Agreement goes into effect. If the agreement is not reached before 31 August 1994, this representative or these representatives shall be appointed by the UN secretary general or the chairman of the Council on Security and Cooperation in Europe.

The Combined Commission, on the initiative of the Parties, or a representative of the aforementioned international organization, on the initiative of the Manager of the Facility or the Representative of Latvia, and also on its own initiative shall consider and resolve on the basis of a consensus any issue related to the execution of the present Agreement. Decisions of the Combined Commission shall be binding for the Manager of the Facility and the Representative of Latvia. If the Combined Commission cannot find a solution that satisfies the Parties within a month's time or comes to the conclusion that the question must be resolved at the governmental level, the question is turned over for the consideration of the governments of both Parties, which, if necessary, may agree to transfer the dispute for the consideration of the international court of the United Nations.

- 2. The Latvian Party shall provide members of the Combined Commission with the necessary documents for entering and remaining in the Latvian Republic. Members of the Combined Commission shall enjoy the same rights to visit the Facility as is enjoyed by the Representative of Latvia.
- 3. Sessions of the Combined Commission shall be conducted as necessary. Protocols of the sessions of the

Combined Commission shall be submitted to the governments of both Parties. If a special session of the Combined Commission is convened at the request of 'he Manager of the Facility or the Representative of La. ia, the session of the Combined Commission shall be conducted within three days of the receipt of the request.

Article 15

- 1. In order to monitor the implementation of the present Agreement, inspection teams of the Conference on Security and Cooperation in Europe shall be invited periodically. The schedule for these inspections during the course of the year shall be determined at the first session of the Combined Commission for the corresponding year.
- 2. Special inspection teams shall be invited on the initiative of the Latvian Party. All costs involved with these inspections shall be borne by the Party that initiates the invitation.

The premises of the Facility that are classified as indicated in Appendix No. 3 shall not be subject to inspection. The aforementioned shall also be observed upon application of point 6 of Article 5 of the present Agreement.

- 3. No more than two periodic and two special inspections shall be conducted each year.
- 4. If a special inspection team is invited, the Latvian Party within 48 hours before its arrival shall notify the Combined Commission and the Manager of the Facility, providing a list of the inspectors.
- 5. The inspectors, whose number must not exceed three, shall enjoy the same rights to visit the Facility as are enjoyed by the Representative of Latvia. The Representative of Latvia and the Manager of the Facility shall accompany the inspectors while they are on the territory of the Facility. The duration of one inspection must not exceed three days. Conclusions of the inspection team shall be turned over for familiarization to the Combined Commission, the Manager of the Facility, and the Representative of Latvia.
- 6. In addition to inspections included in the schedule drawn up by the Combined Commission, periodic inspections shall be conducted within three days after the termination of the temporary functioning of the Facility and also on the day of the expiration of the present Agreement.

Article 16

- 1. The period of temporary functioning of the Facility shall end on 31 August 1998.
- 2. The dismantling of the existing radar station shall begin on 1 September 1998 and end no later than 29 February 2000.

If before the end of the period of temporary functioning of the Facility a station to place it is put into operation outside the Latvian Republic, the Russian Party shall immediately notify the Latvian Party of this. And within 30 days after the replacement structure goes into operation, the dismantling of the Facility shall begin.

During the period of dismantling the structures indicated in Appendix No. 4 that are located on the territory of the Facility shall be removed and, if necessary, the land shall be recultivated.

During the period of dismantling the equipment shall be shipped or sold on the spot.

Dismantling work at the existing radar station envisioned by the present Agreement shall be conducted at the expense of the Russian Party. The dismantling may be carried out both by personnel working at the Facility and by individuals hired by the Russian Party especially for performing this task. When recruiting personnel for dismantling, preference shall be given to residents of the Latvian Republic.

- 3. If necessary the number of personnel employed in the dismantling work who are citizens of the Russian Federation may be increased by mutual consent of the Parties.
- 4. The Russian Party shall take measures to provide for the proper financing of the dismantling work.
- 5. The Latvian Party shall at its own expense disassemble the incomplete station or transform it into a facility for civilian purposes. After the signing of the present Agreement the section servicing the building of the station shall be turned over to the Latvian Party. The list of structures of the incomplete station and the boundaries of the section of area turned over for servicing the building of the incomplete station shall be given in Appendix No. 5 to the present Agreement. The Latvian Party shall not impede the dismantling conducted by the Russian Party or the shipment of equipment and components from the incomplete station or the section serving it.

The work for disassembling the incomplete station or transforming it into a facility for civilian purposes should not impede the functioning of the existing station. The Latvian Party shall bear responsibility, including material, if as a result of the aforementioned work harm is caused to the life and property of personnel servicing the Facility or members of their families, the station that is in operation, and also facilities related to it.

6. After the signing of the present Agreement the railside base for loading equipment and servicing its section of land in the village of Skrunda shall be turned over to the Latvian Party. The Latvian Party shall not impede free use, when the Russian Party requires it, of railroad sidings and the rail side base for loading equipment when shipping property and equipment of the Russian Party during the period of temporary functioning and dismantling.

Article 17

Calculations for rental payment and also payments related to the temporary functioning of the Facility and financing dismantling work shall be carried out in currency of the Latvian Republic through the correspondent subaccount of the institution of the Central Bank of the Russian Federation opened in one of the Latvian commercial banks according to the choice of the Russian Party.

Funds in the correspondent subaccount of the institution of the Central Bank of the Russian Federation shall be formed through transfer by the Russian Party of foreign currency to maintain the Facility and through other revenues.

Foreign currency from the Russian Party in the Latvian commercial bank shall be converted into Latvian lats and transferred at the expense of the institution of the Central Bank of the Russian Federation in this bank according to the agreed-upon exchange rate that is oriented to the currency market of Latvia.

Article 18

- 1. Nothing in the present Agreement may be used to commit actions aimed against the sovereignty or interests of the security of the Latvian Republic.
- 2. The Russian Party shall be obligated not to conclude any agreements regarding the Facility with third countries without the consent of the Latvian side. This does not pertain to the right of the Russian Party to dispose of information obtained by the Facility.
- 3. The Russian Party shall be obligated before the present Agreement takes effect to submit to the Security Council of the United Nations a document confirming the guarantees from the Russian Federation that the present Agreement will not be used to commit actions directed against the sovereignty and interests of the security of the Latvian Republic.
- 4. Any attempt to resolve disputes or disagreements related to the present Agreement using the threat of force or the application of it shall be regarded as a threat to peace and international security which shall be subject to consideration in the Security Council of the United Nations in keeping with Article 39 of its Charter.

Article 19

The Parties shall not make any changes or additions to the present Agreement, shall not extend the period of effect of the Agreement, and shall not renew it.

Article 20

The present Agreement shall take force on 1 September 1994 under the condition that the Agreement between the Russian Federation and the Latvian Republic on conditions, time periods, and procedure for complete withdrawal from the territory of the Latvian Republic of armed forces of the Russian Federation and their legal position during the period of withdrawal has taken effect and armed forces of the Russian Federation have been completely withdrawn from the territory of the Latvian Republic. It shall remain in effect until the completion of the fulfillment of all of its provisions.

Article 21

The present Agreement shall be subject to registration in the Secretariat of the United Nations in keeping with Article 102 of the UN Charter.

Done in the city of 1994 in two copies, in the Russian and Latvian languages, each text having equal force.

Redesignation of Military Antenna Viewed

PM0306134394 Moscow NOVAYA YEZHEDNEVNAYA GAZETA in Russian 30 May 94 p 1

[Vladimir Nevelskiy report: "No Need To Beware of Space Communications"]

[Text] St. Petersburg—A hitherto top-secret installation 20 kilometers from Ventspils and owned by the Russian Defense Ministry's Main Intelligence Directorate (GRU) opened its doors Monday to Latvian parliamentarians, the scientific public, and journalists.

This former military camp, where a handful of specialists and soldiers remain, is still kept in ideal order. There is no spitting or discarding of cigarette butts here. Everything is spotlessly clean. And yet the camp is not so small. It is located in the depths of the border zone, covering 40 hectares of a beautiful pine forest. There are five apartment blocks of 100 apartments each on its territory, along with a kindergarten, school, barracks, large hospital, club, gymnasium, and stadium. Add to this a superb garage and filling station and a powerful boilerhouse and generator hall with two marine diesel generators each producing one megawatt, and you will have some idea of the site, whose existence used to be a strict military secret.

Its main asset is its unique 32-meter antenna. All around the world such giant installations can be counted on the fingers of one hand. This 1,000-tonne structure designed for space communications is one of the most precise and complex of modern instruments. It is around this antenna that the fuss has now developed.

Owing to the hasty Russian troop withdrawal from Latvia our country is nursing colossal losses. There are many installations on this Baltic republic's territory which cost astronomical amounts of money to build and are now having to be abandoned. In particular, Latvia has inherited 26 former military airfields with ideal concrete runways (four of them are the best in Europe) capable of handling all types of aircraft, including the heaviest transports. Latvia is simply unable to digest everything it has inherited. Real estate, even if left unmonitored for a short period of time, becomes easy prey for looters. There are now whole gangs of them in the republic who rob abandoned military installations. For instance, immediately after one flying unit was withdrawn and redeployed to the east, the robbers descended on the deserted airfield. When, a couple of days later, representatives of the local authorities arrived here, they saw a picture that is now typical of Latviastores were opened and sealed premises broken into. The raiders took everything they could find, including doors and window frames.

Obviously, the same fate would be in store for the Ventspils installation. But, fortunately for it, events have begun to develop to quite a different scenario.

When equipment was removed and the question of dismantling the antenna arose, the military consulted its developer—Professor Boris Alekseyevich Poperechenko, chief designer at the Moscow Power Institute. He flew in and satisfied himself that dismantling the dish would be impossible. Did that mean it had to be blown up? No, the chief designer could not tolerate the idea of destroying his brainchild, which was the embodiment of state-of-the-art Russian technology. He suggested a different option. That was how the news of this unique installation reached the Russian Academy of Sciences. And the leaders of the Applied Astronomy Institute proposed using it for absolutely peaceful purposes.

The fact is that this antenna is a superb radio telescope. The Russian Academy of Sciences' scientific organizations had never dreamed of such modern equipment. The largest telescope our radio astronomers have available to them is the 22-meter dish in Serpukhov. Consequently, when they need to do serious space research, they are forced to appeal to the military and to lease free time on their dishes. Understandably, in this situation you can only ever do one-time experiments, rather than systematic observations.

There was one other reason why it was important for the Russian Academy of Sciences to get its hands on the Ventspils installation. For eight years now the Applied Astronomy Institute has been implementing under a government decree the "Quasar" project—a national Russian system of radio interferometers to be based on six 32-meter dishes located over a huge area from Leningrad Oblast to Kamchatka and from Murmansk to the North Caucasus. The greater the distance between the dishes, the more accurately the coordinates of stars and quasars can be determined and the more reliable the research results will be.

Project "Quasar" will also make it possible to resolve purely applied tasks connected with precision cartography, geodesy, the study of the country's natural resources, and so forth. But the construction of each of its six centers will require billions in expenditure and take a long time—building a counterpart of the Ventspils dish will take up to 10 years. That is why the scientists are so interested in using it for the needs of fundamental and applied science.

This sensible and noble idea has met with a response from virtually everyone. After visiting Riga in late April a government delegation from Moscow signed a protocol envisaging joint work between scientists from the two academies of sciences, and a fundamental decision was reached to set up a Latvian-Russian radio astronmy center. It only remains to sign the already prepared draft intergovernmental agreement, but....

"Initially we could not understand what was going on in Latvia," Andrey Finkelshteyn, deputy leader of the Russian Government delegation and director of the Applied Astronomy Institute, said. "All the necessary permits and signatures had seemingly been collected, the idea had been approved in government circles, and—nothing happened. Then we realized that the Latvian Government is in a more difficult position than our own: Every step it takes is monitored by the opposition, if it took one step out of line it would be destroyed. Consequently, the republic's leaders are afraid that during the debate in the Saeima somebody will state that it is not Russian scientists who want to come to the Ventspils site, but disguised intelligence operatives; that the government has struck a deal with the Moscow generals.... And another scandal would break."

It was in order to calm things down and reassure the Latvian public that such fears are groundless, that the sensational "open-door" event was held near Ventspils Monday.

UKRAINE

Morozov: Warheads Transfer Must Be Halted AU1506123694 Kiev UKRAYINSKA HAZETA

in Ukrainian No 12 (54) 9-22 Jun 94 p 8

[Article by Col. Gen. Kostyantyn Morozov, UKRAY-INSKA HAZETA military columnist: "We Had and Still Have Security Guarantees in Our Hands. The Crimean Tension in Relations With Russia Is a Consequence of Ukraine's Nonnuclear and Nonaligned Status"]

[Text] From the first days of its existence as a state, Ukraine has been resolving the so-called Crimean problem on a daily basis. Even before the world felt this, it was already known in Ukraine that the Crimean issue would perhaps be a decisive one in the political relations between Ukraine and Russia. Due to the irresponsible steps taken by the Simferopol leadership, which adopted

the course toward secession from Ukraine and rapprochement with Russia, especially at the beginning of May [1994], the world finally perceived a threat to peace in Ukraine, and in Europe, in these relations. Ukraine must now determine its attitude toward these issues. The history of the problem took shape right before our own eyes, and everybody remembers it. No matter how bitter one might feel about it, our Ukrainian mistakes and indecisiveness are largely responsible for the intensification of Russia's influence over the Black Sea Fleet and, through it, in Sevastopol and the entire peninsula.

In January 1992, the fleet commander [Admiral Kasatonov], who clearly occupied anti-Ukrainian positions, was not removed from his post. His presence in Sevastopol made it impossible for officers of the fleet to adopt a stand with regard to loyalty to Ukraine. Still, by the end of March 1992, the majority of the officer corps anticipated Ukraine's governmental decisions regarding the subordination to Ukraine's Defense Ministry.

Both the Ukrainian president and the government realized that special conditions for shaping public opinion in Sevastopol (the majority of its residents are former sailors and their families that arrived there from other Russian fleets; a great number of enterprises there depend upon the fleet; there are social problems for families of veterans and servicemen) also required special approaches, in contrast to the situation with the subordination of three military districts in Ukraine.

In April 1992, there was yet another attempt to subordinate the fleet to Ukraine. However, again, due to its indecisiveness, the government did not go beyond the creation of a parallel structure (the headquarters of the Naval Forces). Unfortunately, the headquarters was immediately discredited and its influence upon Black Sea Fleet officers who were supporters of Ukraine was insignificant.

Fearing complications, Kuchma's government even canceled the decisions—first steps of Ukraine's Ministry of Defense—in the organization of the Black Sea Fleet financing through our Naval Forces. However, even then everybody understood that, soon, there would be even more problems. That was exactly what happened.

The unsuccessful provocative officers assembly held in Moscow at the beginning of 1992 demonstrated that, in Ukraine, the majority of officers had made up their minds. That is why efforts were concentrated mainly on the fleet.

As far back as in May 1992, active work, with the help of certain Russian forces, began in the fleet. The work was aimed at strengthening anti-Ukrainian sentiment among officers. The first step involved a considerable increase in personnel salaries. The activity of the officers' assembly resumed and an assembly coordination council was created. Active politicization of the officers' corps began. The intensification of Russia's influence on the Black Sea Fleet proceeded "on a legal basis" after signing the Yalta accord (August 1992). Since that time, the

fleet, subordinated to the two presidents, has been taken away from the control of Ukraine's Ministry of Defense, and the fleet activity of Russia's Ministry of Defense and the main staff of Russia's Naval Fleet was practically legalized.

Russia, implementing its financial expansion in the Crimea, artificially created for itself a priority in providing for the fleet.

At the same time, assistance to Sevastopol civilians (the majority of them are former servicemen) in the creation of public organizations and political parties of anti-Ukrainian orientation intensified.

A combination of intentions on the part of those parties and politicized officers over 1992-93 led to an intensification of anti-Ukrainian sentiment in Sevastopol and on the peninsula.

This situation was repeatedly discussed by a corresponding Supreme Council Commission, by the Defense Ministry's board, and by Ukraine's Security Council. Unfortunately, the commission was incapable of giving a proper evaluation of the events, the Defense Ministry's decisions did not find the government's support, and the Security Council took into account the position of the Crimean leadership. Both Bagrov, then chairman of the Crimean Supreme Council, and Yermakov, then presidential representative in Sevastopol, did everything to hamper any of our initiatives and intimidated the government and President Leonid Kravchuk by claiming that "it would lead to an explosion in the Crimea." That was precisely the reason for the July 1993 decision to suspend the formation in Sevastopol of the Ukrainian Armed Forces Marines subdivisions.

Today, all of this is attributed to the president's indecisiveness. I find it necessary to throw light on the situation and include everybody. In the majority of cases, the president remained unassisted in looking for decisions that would not lead to an armed conflict.

Such a situation prevailed until the meeting in Massandra: The Supreme Council did not adopt decisions, and the government (of both Fokin and Kuchma) dealt with no military problems whatsoever. In the two years that I held the ministerial post, the military issue was discussed only once (in November 1991, the legislative bill "On Ukraine's Armed Forces").

Under those conditions, Russia's influence on the Crimean problem intensified to the extent that virtually unprecedented territorial claimed were made upon Ukraine (the Russian Supreme Council decree of 9 July 1993 on the status of the Ukrainian city of Sevastopol) and pressure was put on it at the negotiations (Massandra, 3 September 1993).

We heard a lot about Ukraine's position with regard to the presidential elections in the Crimea, but no significant decisions have been adopted by Ukraine's Supreme Council nor actions by the government. Crimean separatists took advantage of the crisis situation in the country and, instead of looking for ways to overcome it, started manipulating it. The political forces and now also the leadership, artificially creating an impression that the Crimean population has the worst standard of living and deceiving the people, are, in fact, satisfying their own ambitions.

More than once I heard about an ethnic source of Ukrainian tension. Few people even in Ukraine speak of the political aspect of the tension or its artificial nature. In this context, the assessment of the situation by chairman of Ukraine's Security Service Yevhen Marchuk (KIYEVSKIYE VEDOMOSTI of 26 May 1994) seems to be not only authentic and patriotic, but also timely: "...the whipping up of panic among the population, the intimidation of the Crimean leadership, the shaping of an enemy image (naturally personified by Kiev), the selfless assistance by experts, the commissioning of groups for propaganda support, and many other things...." I agree with Yevhen Marchuk's conclusion to the effect that all of this will have a counter effect. against the Russian plans to split Ukraine, and that this force "...will become a consolidating one for Ukraine."

All of this has been said about our Ukraine—our own fathers' home. External forces are shaking it loose, and we must rescue it and not moan that life is bad under these conditions.

Ukraine is an active participant in the European and world political process, which is establishing peace and harmony among countries. Many, if not all acts in this process tend to unite us with Russia. However, today, neither Ukraine's membership in the CIS nor bilateral interstate agreements guarantee security for Ukraine.

The fact that the program "Partnership for Peace" does not unite us with Russia is a serious warning. Russia is seeking a priority status in its relations with NATO. The formula "16 Plus One" suits Russia better. It is clear to everybody that this bargaining is not to Ukraine's advantage. Perhaps we are expecting guarantees for our security in vain. Or maybe those guarantees are still in our hands?

Why don't we also do some bargaining, now that Russia does not restrict itself by obligations to politically guarantee Ukraine's security? If, after the withdrawal of nuclear weapons, Ukraine becomes an arena for armed conflicts, maybe it is now time to halt the transfer of warheads and adopt a state program for political and technical measures to maintain them on our own?

At any rate, this will strengthen the Ukrainian position at the negotiations.

It is becoming obvious already that Ukraine's nonaligned status does not guarantee its security or noninterference into its affairs by other states. We see how Russia is increasingly exacerbating the Crimean problem in Ukraine. Perhaps we should revise our striving for nonalignment and neutrality? Maybe a declaration of our intentions to gain membership of NATO would better guarantee Ukraine's security at least in the future? At any rate, it might strengthen our position at the negotiations. The United States must be invited as an intermediary and an authoritative monitor of the fulfillment of the accords.

In April 1994, the Ukrainian Academy of Original Ideas supported my initiative on the creation of an independent Center for Strategic Studies of Military and Political Problems in the National and Regional Security. On 28 May, the Ukrainian World Coordination Council, at its meeting, approved the idea and the draft concept of the center and thereby okayed the creation of a special non-governmental fund.

I believe that the issues raised by me urgently require an independent investigation. The conclusions of such a investigation, in the case of the creation of the center at an advisory level, might be used by state structures for promoting Ukraine's interests.

The Russian Federation is our geopolitical neighbor, an ethnic homeland to large numbers of our citizens, and our potential genuine friend and brother. It is our strong desire that it be realized by it that not only Ukraine, but also Russia are "doomed" to maintain and strengthen this friendship by all possible means. Once again referring to the chairman of Ukraine's Security Service, I want to support his important conclusion: "There will be no split of Ukraine. We are not the Caucasus or Yugoslavia."

Rukh Urges Leaders To Halt Withdrawal of Nuclear Weapons

LD2105092194 Kiev Radio Ukraine World Service in Ukrainian 2200 GMT 20 May 94

[Text] The People's Movement of Ukraine [Rukh] has issued an appeal calling on the Ukrainian president and Supreme Council to take effective measures for the constitution and laws of Ukraine to be implemented in Crimea and the territorial integrity of the Ukrainian state to be ensured. Under the conditions of Russia's continuing informational, organizational, and parliamentary aggression in Crimea, the People's Movement deems it necessary to halt the withdrawal of nuclear weapons from the territory of Ukraine, the document stresses.

Rukh also appeals to the UN Security Council and the Conference on Security and Cooperation in Europe and requests them to prevent Ukraine from being taken to pieces and being plunged into a civil war.

Kravchuk Views Trilateral Disarmament

AU1905144594 Lvov ZA VILNU UKRAYINU in Ukrainian 14 May 94 p 1

[Report by UKRINFORM correspondents Viktor Demydenko and Mykhaylo Melnyk: "Ukraine Is Fulfilling Its Obligations on Withdrawing Nuclear Weapons"]

[Text] The process of dismantling and transfering [nuclear] warheads from Ukraine to Russia is under full control and is in conformity with the schedule. As of today [14 May], 180 warheads have already been transferred to the Russian Federation. This was stated today [14 May] by Ukrainian President Leonid Kravchuk during the opening of the Kiev Spring Fair.

"It is no secret for anyone that the nuclear missiles deployed on the territory of Ukraine are not controlled by it, since the nuclear 'button' is in Moscow. Pesides, Ukraine has never even tried to possess such formidable weapons," continued the president. He confirmed Ukraine's intention to fulfill in full the "tripartite agreement" signed, at the beginning of this year, by the presidents of Ukraine, Russia, and the United States.

"When we signed the agreement, we hoped that other nuclear countries would follow suit and would start disarming," continued Leonid Kravchuk. "Today, I have information that, in fulfillment of the accords reached during the Moscow meeting, the United States, too, intends to destroy, on a very large scale, its nuclear arsenals," stated the head of the Ukrainian state.

According to him, by the end of May, all U.S. missiles aimed at Ukraine will be recoded. "Therefore, time is coming when our states actually proceed from words about friendship and cooperation to concrete deeds," emphasized Leonid Kravchuk.

Officers' Union May Insist on Ukraine Staying Nuclear

LD1506204494 Moscow INTERFAX in English 1827 GMT 15 Jun 94

[Text] Ukrainian MPs who are members of the country's Officers' Union will insist that Ukraine stay nuclear if the Crimean parliament does not align the Crimean legislation with the Ukrainian laws. Vyacheslav Belous, the union chairman, made this statement in Kiev Wednesday.

Kiev wants Crimea to rescind the original wording of its May 6, 1992 Constitution that calls for a treaty-based relationships between Crimea and Ukraine and enables the Crimean residents to have dual citizenship.

Pelous said that his organization would support Leonid Kravchuk in the June 26 elections.

The Officers' Union, he said, opposes the attempts that anti-state forces inside and outside the Supreme Soviet

mount to eliminate or disable the presidency in Ukraine. It regards the president as the guarantor of the country's unity and independence.

The Ukrainian Officers' Union has a membership of about 10,000.

Joining Non-Proliferation Treaty 'Not of Great Urgency'

LD0206163794 Moscow INTERFAX in English 1422 GMT 2 Jun 94

[From the "Diplomatic Panorama" feature: by correspondents Igor Porshnev and Vitaly Trubetskoy]

[Text] The issue of Ukraine joining the Non-Proliferation Treaty is not of great urgency, believes one of the closest advisers of President Leonid Kravchuk.

"At present the Ukrainian parliament must first of all consider economic issues," leader of the presidential service on foreign policy Anton Buteiko declared in his interview with the agency Interfax-Ukraine Thursday.

In his opinion, "Kiev fulfills the treaty's demands striving for a non-nuclear status" without joining the NPT Treaty.

On June 1 Ukrainian President Leonid Kravchuk submitted a draft decree on Ukraine joining the NPT Treat to the parliament for consideration. According to the project, "presence of nuclear weapons on the Ukrainian territory till its complete destruction does not contradict the Treaty."

In addition, Kiev intends to view "the violation of the territorial integrity and inviolability of its border on the part of any nuclear state" as a violation of the NPT [Non-Proliferation] Treaty.

Kravchuk is once more addressing the parliament with a proposal to join the treaty. On February 3 this year Ukraine's parliament expressed its intention to consider this problem in the future.

Shmarov Views Military Conversion Program, U.S. Assistance

WS2305125594 Kiev Ukrayinske Radio First Program Network in Ukrainian 0500 GMT 23 May 94

[Text] By 30 May, U.S. strategic and ballistic missiles will no longer be targeted at Ukraine. As a reminder, this decision was reached at the Ukrainian-U.S. negotiations in Washington on 11-14 May 1994. In those days, the Ukrainian Government delegation headed by Deputy Prime Minister Valeriy Shmarov discussed with the

American side a wide range of issues related to nonproliferation of missile systems carrying mass destruction weapons, development of the trilateral process in the sphere of nuclear disarmament, and mutual cooperation in rocket and space industry, etc. Our correspondent, Viktor Bak, interviewed Ukrainian Deputy Prime Minister Valeriy Shmarov.

[Begin recording] [Bak] During your visit to the United States, the delegation that you headed also discussed the issue of cooperation in the sphere of conversion.

[Shmarov] You know that the Ukrainian Government and the U.S. Administration set up a joint conversion commission. On the American side, it is headed by U.S. Secretary of Defense William Perry, and on the Ukrainian side, by Machine Building Minister Chernenko. This commission has been quite busy (?since last fall). The commission has pinpointed about 30 projects. We examined those projects together with the United States. At present, interested partners are being sought. What are these partners for? First, the United States does not have sufficient funds to finance this program—a small amount was earmarked for the conversion. We seek to attract the private capital of American entrepreneurs and companies. In practical terms, selection of partners and signing of projects will probably be carried out in July. We have determined the terms for one pilot project. which is a joint venture of the well-known U.S. company Westinghouse and Ukraine's Hartron. Hartron is an enterprise that was oriented toward developing rocket industry products, currently subject to the conversion plan. So, we envision that it would be engaged in developing safety and control systems for nuclear power plants. As you know, this is a major problem for us today. This project has been signed. The U.S. Government allocated \$5 million for this project, while Westinghouse designated \$20 million [words indistinct], and we offer our production and scientific resources. I think that this project will assume realistic (word indistinct). [end recording]

Ukraine Seeks Russian Services in Exchange for Bombers

LD1905121494 Kiev UNIAN in Ukrainian 0945 GMT 19 May 94

[Text] Kiev [no date as received]—Lt. Gen. Lev Ihnatenko, chief of the Ukrainian Armed Forces' armaments staff, told a briefing for journalists on 18 May that, in compliance with accords on the withdrawal of nuclear weapons from the territory of Ukraine, it is planned to send 200 nuclear warheads to Russia this year. Thus far, he said, 180 nuclear warheads have already been removed. As for the future destiny of strategic bombers, with 42 heavy bomber aircraft remaining on the territory of Ukraine—19 Tu-160's and 23 Tu-95M's—the lieutenant general stressed that in exchange for the transfer of these aircraft to Russia,

Ukraine would like to be able to have other aircraft of the Ukrainian Armed Forces technically maintained and spare parts supplied for various weapons systems. A settlement of this issue by the Russian side is forthcoming. Lev Ihnatenko also noted that although only 25 percent of the research and development institutions's requirements have been met, work on the creation of up-to-date armaments systems, including precision weapons, is continuing.

CYPRUS

Amendment To Resume Nuclear Tests Submitted to Parliament

BR2405143094 Paris LE QUOTIDIEN DE PARIS in French 24 May 94 p 5

[Unattributed report: "Jacques Baumel Puts His Foot Down"]

[Text] In line with his credo, the Gaullist Jacques Baumel has decided to put his foot down. The RPR [Rally for the Republic] deputy chairman of the parliamentary defense committee on Saturday tabled an amendment to the bill for the military programming law for the period 1995-2000, stressing the need to resume nuclear testing.

During a televised interview on 10 May, Francois Mitterrand nonetheless said with regard to the resumption of nuclear testing: "Where such a serious issue is concerned, if Parliament or the government were to significantly disagree with me, I would ask the people to decide." The head of state did not specify whether this call to the people would come in the form of a referendum or if he would dissolve the National Assembly.

Jacques Baumel's amendment mentions the need for a "resumption of nuclear testing" to acquire the means of simulating tests. Before coming up for general debate, the amendment is to be examined this morning by the defense committee. The deputy explained: "I am trying to clear up the skillfully maintained confusion according to which a simulation device" such as the PALEN (Preparation of a Limitation of Nuclear Testing) system can be acquired "without testing." He recognized that no experiments could be carried out before the end of Francois Mitterrand's term of office. Jacques Baumel stressed that this delay "does not, however, mean that tests should not be planned for a later stage in order to preserve the future," and he reiterated that the planning law covered six years.

GERMANY

Commentary Says U.S. Nuclear Disarmament Policy 'Ill-Fated'

AU2405155994 Duesseldorf HANDELSBLATT in German 24 May 94 p 2

[Commentary by Viola Herms Drath: "A Matter of Survival"]

[Text] President Bill Clinton's foreign policy continues to be somewhat vague. The non-proliferation of nuclear mass destruction weapons, which Washington has put at the center of its foreign policy, is increasingly ill-fated. The failed attempt to make North Korea rejoin the NPT [Non-Proliferation Treaty] and to include India and Pakistan in a regional conference emphasizes the lack of concept that the current disarmament policy suffers from.

This was expressed, amongst others, by India's Prime Minister Rao during his visit to Washington, when he criticized that moral leadership is claimed by those who demand from others what they themselves are not prepared to do.

Although the U.S. Administration is calling on the nuclear have-nots to join a discriminating non-proliferation regime, it is by no means planning to scrap the United States' nuclear weapons altogether. The Geneva UN Disarmament Conference may be seeing preliminary talks on the renunciation of the use of nuclear weapons against non-nuclear states; however, talks on extending the nuclear deterrent in the sense of Klaus Kinkel's non-proliferation policy failed because the nuclear states rejected an expansion of multilateral defense obligations.

Bilateral talks are no longer about arms testing but "only" about deploying operative arms systems. Clinton's advisers know very well that a nuclear condominium in South Asia and the Far East makes nonproliferation more difficult. However, sobered by the experience in Bosnia, Somalia, and Haiti, the Pentagon is preparing a counter proliferation initiative-although modestly funded at a mere \$450 million-in case the non-proliferation talks fail. Just as Reagan's Strategic Defense Initiative was to protect the United States from a strategic first blow, Clinton's program of Counter Proliferation is taking a unilateral course of its own. According to a few critical voices in the U.S. Congress, this could lead to an unpredictable nuclear race, as a result of which the world would face more than the 15 states that are known as possessing nuclear weapons today.

The annual meeting of the UN Disarmament Commission in New York was aiming at a clear signal toward an unconditional and unlimited extension of the NPT in April 1995. But instead, reaching a consensus was prevented because there was no clear definition of the objectives of disarmament. This gives rise to the question whether the current non proliferation regime is fit to survive. Although the nuclear states basically share the view of non-nuclear states that non-proliferation is inseparably linked with nuclear disarmament, the codifying of an international agreement to eliminate nuclear weapons arsenals, which has been demanded by several states, and the direct coupling to non-proliferation of nuclear weapons still fail to take place.

Government Refuses To Report Number of Missiles to UN

AU0606162594 Hamburg DER SPIEGEL in German 6 Jun 94 p 17

[Unattributed report: "Bonn Secrets"]

[Text] The FRG Government refuses to report the number of German missiles to the arms register of the United Nations. The latest report contains information on the purchase of 30 "Mars" rocket launchers and the 6,180 missiles belonging to them (with a range of 38 km) that were procured by the Bundeswehr last year. But the total number of systems and missiles of this series and other types is missing. However, the United States and Great Britain do not shrink from listing their considerable arsenals (120,331 and 32,853 units respectively).

The Mars systems, which are jointly produced with Germany, are also contained. In contrast to 1992, Bonn also did not report 40 guided AA-10 missiles from GDR [German Democratic Republic] arsenals this time. The Defense Ministry supports the mystery-mongering with the statement that "this data must not be conveyed to the United Nations because a relevant secrecy agreement does not exist." The arms register, for whose establishment the FRG also pressed in 1991, is to provide a survey of international arms arsenals and arms exports.

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